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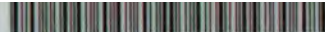
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ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT



OF THE
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Mr. Thomas F. Sullivan,
Commissioner of Public
Works.

ANNUAL REPORT

Boston,

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR 1918

COMPLIMENTS OF

THOMAS F. SULLIVAN,

Commissioner of Public Works

PLEASE EXCHANGE

CITY OF BOSTON
PRINTING DEPARTMENT
1919

ANNUAL REPORT

Boston,

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR 1918



CITY OF BOSTON
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1919

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ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1919.

Boston, February 1, 1919.

HON. ANDREW J. PETERS,
Mayor of the City of Boston:

SIR,— In compliance with Revised Ordinances, the annual report of the operations and expenses of the Public Works Department for the year ending January 31, 1919, is respectfully submitted. The Public Works Department, created by Ordinances 1910, chapter 9, now chapter 28 of the Revised Ordinances of 1914, was formed by consolidating the Engineering, Water and Street Departments.

ORGANIZATION.

A change in the organization of the department was made effective April 17, 1918. The reorganization divided the department into five main divisions, viz.:

Central Office.— The Central Office is composed of the accounting force of the entire department under the charge of the secretary and chief clerk.

Bridge and Ferry Division.— This division, under a division engineer, has the charge and care of all bridges used as highways which are in whole, or in part, under

the control of the city; the care and management of the ferries owned by the city, including boats, slips, drops and buildings.

NOTE.—The Boston and Cambridge Division, so called, is not strictly speaking a division of the Public Works Department, as this work is in charge of a commission of two, one member appointed by the Mayor of Boston and the other by the Mayor of Cambridge, under the provisions of chapter 412 of the Acts of 1904; but because of the fact that the present Commissioner of Public Works is the Boston member of this commission and also because one half of the expenses of this commission is defrayed by the Bridge Service, it is in this report treated as a division of this department.

Highway Division.—This division, under a division engineer, has the care of the construction, reconstruction and maintenance of roadways and sidewalks; the care of lamps and the lighting of streets, parks and alleys.

Sewer and Sanitary Division.—This division, under a division engineer, has charge of the construction of sewers, catch-basins and waterways; the collection of and removal of ashes, garbage, refuse and street cleanings.

Water Division.—This division, under a division engineer, has the care of water pipes, installation of meters, water services, laying and relaying of water mains and the high pressure service.

IMPORTANT WORK DONE.

Brookline Avenue Bridge, contract for reconstruction having been made in 1917, is progressing as well as could be expected under adverse conditions and will be completed early in 1919.

An appropriation by the City Council, amounting to \$270,500, provided funds for much needed repairs on bridges. A number of contracts were made, but on account of Government restrictions on the delivery of material the work has been delayed. It is expected that all work on bridges contracted for during the year of 1918 will be completed in 1919. The most important work is the rebuilding of Broadway Bridge over the Boston & Albany Railroad; the reconstruction of Harvard Bridge in conjunction with the city of Cambridge; the widening of Norfolk Street Bridge over the New York, New Haven & Hartford Railroad, and the

alteration of the Northern Avenue Bridge to permit the operation of freight trains by the Union Freight Railroad Company.

A special appropriation of \$95,000 made money available for repairs to ferryboats, drops, piers and headhouses.

The boiler of the ferryboat "Hugh O'Brien" has had to be replaced. Extensive repairs have been made to the ferryboat "General Sumner," which was largely destroyed by fire in 1917, and an increase of 60 per cent made in its teaming capacity.

The finding of the Board of Gas and Electric Light Commissioners, under the arbitration clause of the contract between the City of Boston and the Edison Electric Illuminating Company of Boston, was in favor of the City of Boston. By this decision the contract price of the "running costs per lamp hour" for the different types of lamps was substantially reduced. Also rebate credits for the preceding years of the contract amounting, with interest, to \$147,746.25 were deducted in monthly installments from the monthly bill of the Edison Electric Light Company.

The Charlestown Gas and Electric Company adopted the new schedule of prices for the Edison Company and also made credit rebates to the amount of \$7,578.49.

The nonlighting of almost one third of the gas lights and a large number of arc lights, as a fuel conservation measure, produced a further saving in the cost of street lighting for the year. The saving for the year, as a result of the finding of the Board of Gas and Electric Light Commissioners and nonlighting of lamps, amounted to approximately \$225,000.

Chapter 120 of the Acts of 1918 authorized the City Council, with the approval of the Mayor, to vote for the repair and reconstruction of streets, including specific repairs by contract, one dollar on each one thousand of the valuation upon which the appropriations by the City Council are based.

The passage of this statute made available from the tax levy \$1,541,597.61. A committee, appointed by his Honor the Mayor, selected the streets upon which this money was to be spent and also determined the form of pavement. With a few exceptions the main arteries of travel were selected by the committee. The total area of the work to be done and charged to this appropriation is about 175,000 square yards.

In addition to the above, an annual appropriation from the tax levy of \$318,819.27 for street reconstruction was voted by the City Council.

Uncompleted contracts from the preceding year and the work made possible with money appropriated during the year provided the Paving Service with a variety of construction and reconstruction work. Government restrictions, on account of the war, which became effective in September, postponed the starting of some of the contracts and delayed the completion of others. Despite this fact about 100,000 square yards of granite blocks on a concrete base and approximately 75,000 square yards of smooth pavement were laid.

An execution of court, amounting to \$82,500, was paid to N. Ward & Co. for damages for taking of real estate at Spectacle Island for a garbage plant. A loan of \$15,000 for this purpose was made in 1912, but this sum was not acceptable to the owners who sued and recovered \$82,500. The deficit in the appropriation was made up by the City Auditor by transfers from other department loans.

An increase in the revenue of the Sanitary Service for the year, amounting to \$16,150, was obtained by increasing the price of tickets for the removal of commercial waste from 7 cents to 11 cents per barrel. This change became effective September 1.

The use of electric car sprinklers has proved very satisfactory for the sprinkling of car-track streets in the daytime and for flushing at night. The macadam streets in West Roxbury are now being regularly cleaned with hired men and equipment.

An aggregate of 28,767 cubic yards of dirt was removed from 7,628 catch-basins and 156 drop inlets during the year. Formerly contractors were paid by the basin and not on a cubic yard basis as is now the practice. Sanitary sewers and surface drains to the amount of 6.9 miles were built during the year.

The Legislature suspended for the year the statute which requires the annual equipment with water meters of 5 per cent of the water services of the city.

One mile of pipe was added to the high pressure fire service, three miles of new water mains were laid and five and one quarter miles of mains relaid.

Several pieces of property in charge of this department have been either sold or abandoned during the year. The disposal of this property in addition to furnishing revenue to the city saved the annual cost of maintenance.

The property disposed of was the main drainage yard at 759 Massachusetts avenue (sold for \$9,800), Water Service yard on Condor street, East Boston (sold for \$22,500), portion of pumping station lot on Water street, Hyde Park (sold for \$1,700). The headquarters of the Bridge Service on Broadway Extension, South Boston, were transferred to the Albany Street water yard. This property will be sold in the near future.

APPROPRIATIONS.

The money assigned for the work of the Public Works Department during the year was made available from the following sources:

First.— Maintenance appropriation, derived from the income of the city raised by taxation. In December, 1917, the department estimates of the money necessary for the proper maintenance and conduct of affairs of the different services were submitted to the Mayor. The estimates were made in segregated form to the Mayor, who made such allowance for each item in the budget as he considered necessary and submitted them to the City Council. The total maintenance appropriations as passed by the City Council and approved by the Mayor are shown below. On another page will be found the total expenditures by each service, for each item in the segregated budget:

Central Office	\$79,125 05
Bridge Service	358,841 62
Ferry Service	388,619 50
Lighting Service	576,652 62
Paving Service	1,115,283 17
Sanitary Service	1,127,386 08
Street Cleaning and Oiling Service	766,286 96
Sewer Service	428,123 38
Water Service	1,100,686 12
Total	<u>\$5,941,004 50</u>

Boston and Cambridge Bridges.*

Second.— Loan inside the debt limit for building new streets assessable on abutting property, authorized by chapter 393 of the Acts of 1906. (Paving Service.)

Amount expended during the year	<u>\$258,739 07</u>
---	---------------------

* Paid by Bridge Service and included in that appropriation.

Third.— Loan inside the debt limit under the provisions of chapter 426 of the Acts of 1897, as amended by chapter 204 of the Acts of 1908, from which all sewerage works are built, except those in the Charles River Basin watershed. (Sewerage Works — Sewer Service.)

Balance February 1, 1918	\$46,730 35
Loan	600,000 00
Total	<u>\$646,730 35</u>
Expended during the year	484,762 78
Balance January 31, 1919	<u>\$161,967 57</u>

Fourth.— Loan under the provisions of chapter 383 of the Acts of 1903, as amended by chapter 485 of the Acts of 1907, by chapter 514 of the Acts of 1908, by chapter 612 of the Acts of 1911, and by chapter 348 of the Acts of 1912, which provided that the City of Boston shall in the year 1913 expend \$400,000 and in each of the next four years shall expend \$400,000, to be met by loan inside the debt limit. (Separate Systems of Drainage — Sewer Service.)

Balance February 1, 1918	\$60,363 85
Expended during the year	59,087 53
Balance January 31, 1919	<u>\$1,276 32</u>

Fifth.— Loan inside the debt limit, under the provisions of chapter 312 of the Acts of 1911, for the installation of a high pressure fire service. (Water Service.)

Balance February 1, 1918	\$138,047 61
Loan	140,000 00
Total	<u>\$278,047 61</u>
Expended during the year	* 98,347 37
Balance January 31, 1919	<u>\$179,700 24</u>

SPECIAL APPROPRIATIONS.

Loan inside the debt limit under the provisions of chapter 661, Acts of 1912, for the widening and laying out of certain streets in Boston. (Paving Service.)

* Total expended to January 31, 1919, \$820,299.76.

Expended during the year on:

Belgrade avenue, extension, and Beech street, widening	\$1,717 11
Chelsea street, Charlestown, widening	8,373 89
Hyde Park avenue, widening	4,121 99
Norfolk street, Dorchester, widening	79,037 46
Charles street, from Spring street to Hamilton street, now called Caledonian avenue	47 00
Total	<u>\$93,297 45</u>

BRIDGES, REPAIRS, ETC. (Bridge Service.)

Appropriations from taxes	\$270,500 00
Expended during the year	42,480 75

Balance January 31, 1919	<u>\$228,019 25</u>
------------------------------------	---------------------

BROADWAY BRIDGE, BOSTON & ALBANY RAILROAD. (Bridge Service.)

Balance February 1, 1918	\$3,383 93
Expended during the year	0 00

Balance January 31, 1919	<u>\$3,383 93</u>
------------------------------------	-------------------

BROADWAY BRIDGE, REBUILDING. (Bridge Service.)

Balance February 1, 1918	\$7,045 80
Transferred to Refuse Destructor Site, Spectacle Island	7,045 80

BROOKLINE AVENUE BRIDGE. (Bridge Service.)

Balance February 1, 1918	\$53,101 87
Expended during the year	40,599 56

Balance January 31, 1919	<u>\$12,502 31</u>
------------------------------------	--------------------

CHELSEA BRIDGE SOUTH. (Bridge Service.)

Balance February 1, 1918	\$19,744 87
Expended during the year	947 48

Balance January 31, 1919	<u>\$81,797 39</u>
------------------------------------	--------------------

GRANITE AVENUE BRIDGE. (Appropriation from Taxes —
Bridge Service.)

Appropriation	\$2,488 80
Expended during the year	2,231 74
	<hr/>
Balance January 31, 1919	<u>\$257 06</u>

MALDEN BRIDGE. (Bridge Service.)

Balance February 1, 1918	\$440 46
Revenue received from Boston Elevated Railway Company	19,561 64
	<hr/>
Total	\$20,002 10
Expended during the year	<u>20,002 10</u>

MERIDIAN STREET BRIDGE. (Bridge Service.)

Balance February 1, 1918	\$1,330 98
Transferred to other department appropriations,	<u>1,330 98</u>

SPRING STREET BRIDGE. (Bridge Service.)

Balance February 1, 1918	\$1,676 16
Revenue from town of Dedham as part of share of cost of construction	4,579 52
	<hr/>
Total	\$6,255 68
Transferred to other department appropriations,	<u>6,255 68</u>

WINTHROP BRIDGE. (Bridge Service.)

Balance February 1, 1918	\$4,466 56
Expended during the year	\$650 00
Transferred to other department appropriations	3,816 56
	<hr/>
	<u>4,466 56</u>

GRANOLITHIC SIDEWALKS. (Paving Service.)

Balance February 1, 1918	\$18,792 22
Appropriation from taxes	100,000 00
	<hr/>
Total	\$118,792 22
Expended during the year	\$36,703 13
Transferred to other department appropriations	75,000 00
	<hr/>
	111,703 13
	<hr/>
Balance January 31, 1919	<u>\$7,089 09</u>

RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT. (Paving Service.)

Balance February 1, 1918	\$172,457 67
Appropriated from taxes	1,860,416 88
Total	<u>\$2,032,874 55</u>
Transferred to Street Improvements	491,276 94
Expended during the year	<u>\$1,541,597 61</u> 497,830 14
Balance January 31, 1919	<u><u>\$1,043,767 47</u></u>

STREET IMPROVEMENTS. (Paving Service.)

Transferred from Reconstructing and Repairing Streets by contract	\$491,276 94
Expended during the year	465,067 13
Balance January 31, 1919	<u><u>\$26,209 81</u></u>

FERRY BOATS, REPAIRS, ETC. (Ferry Service.)

Appropriations from taxes	\$95,000 00
Expended during the year	67,719 33
Balance January 31, 1919	<u><u>\$27,280 67</u></u>

REFUSE DESTROYER SITE, SPECTACLE ISLAND. (Sanitary Service.)

Balance February 1, 1918	\$15,000 00
Transferred from other appropriations	67,500 00
Total	<u>\$82,500 00</u>
Expended during the year	<u><u>82,500 00</u></u>

SERVICE MAINS AND RELAYING MAINS. (Water Service.)

Balance February 1, 1918	\$25,087 31
Appropriated from water revenue	30,000 00
Total	<u>\$55,087 31</u>
Expended during the year	<u>51,599 48</u>
Balance January 31, 1919	<u><u>\$3,487 83</u></u>

STRANDWAY AND OLD HARBOR IMPROVEMENT.
(Bridge Service.)

Balance February 1, 1918	\$359,601 56
Expended during the year	261,313 15
Balance January 31, 1919	<u>* \$98,288 41</u>

* The cost of sewerage works on this work is charged to the appropriation for Sewerage Works. Cost to January 31, 1919, \$368,833.38.

**Financial Statement of the Public Works Department, Maintenance,
February 1, 1918, to January 31, 1919.**

DIVISIONS AND SERVICES.	Appropriations, 1918-19.	Transfers to.	Transfers from.	Total Credits.	Expenditures, 1918-19.	* Balances, January 31, 1919.
Central Office.....	\$79,125 05			\$79,125 05	\$73,074 04	\$6,051 01
Bridge Service.....	358,841 62	\$6,252 43	\$7,488 60	357,605 45	347,543 91	10,061 54
Ferry Service.....	388,619 50	7,488 60		396,108 10	393,783 69	2,324 41
Lighting Service.....	576,652 62		31,252 43	545,400 19	540,350 56	5,049 63
Paving Service.....	1,115,283 17			1,115,283 17	1,093,630 65	21,652 52
Sanitary Service.....	1,127,386 08			1,127,386 08	1,106,933 20	20,452 88
Street Cleaning and Oiling Service.....	766,286 96			766,286 96	745,638 57	20,648 39
Sewer Service.....	428,123 38	25,000 00		453,123 38	452,310 71	812 67
Water Service.....	1,100,686 12			1,100,686 12	1,055,842 87	44,843 25
Totals.....	\$5,941,004 50	\$38,741 03	\$38,741 03	\$5,941,004 50	\$5,809,108 20	\$131,896 30

* Balances transferred to City Treasurer.

The expenditures under the several appropriations for the year 1918-19 were as follows:

DIVISIONS AND SERVICES.	Current Expenses.	Special Appropriations.	Total Expenditures.	Balances, January 31, 1919.
Central Office.....	\$73,074 04	.....	\$73,074 04	
Bridge Service.....	347,543 91	\$126,473 27	474,017 18	\$262,702 88
Ferry Service.....	393,783 69	67,719 33	461,503 02	27,280 67
Lighting Service.....	540,350 56	.....	540,350 56	
Paving Service.....	1,093,630 65	1,351,636 92	2,445,267 57	1,077,066 37
Sanitary Service.....	1,106,933 20	82,500 00	1,189,433 20	
Street Cleaning and Oiling Service.....	745,638 57	.....	745,638 57	
Sewer Service.....	452,310 71	543,850 31	996,161 02	163,243 89
Water Service.....	1,055,842 87	51,599 48	1,107,442 35	3,487 83
High Pressure Fire Service..	.....	98,347 37	98,347 37	179,700 24
Strandway and Old Harbor Improvement.....	.....	261,313 15	261,313 15	98,288 41
Totals.....	\$5,809,108 20	\$2,583,439 83	\$8,392,548 03	\$1,811,770 29

**Expenditures Under the Maintenance Appropriation of the
From February 1, 1918,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
A. PERSONAL SERVICE AS PER SCHEDULE A:			
1. Permanent employees	\$66,282 42	\$234,331 24	\$195,032 75
2. Temporary employees		4,998 53	10,550 84
3. Unassigned		4,301 98	425 04
B. SERVICE OTHER THAN PERSONAL:			
1. Printing and binding	943 80		795 18
2. Postage	252 69	143 84	2 00
3. Advertising and posting		95 30	32 75
4. Transportation of persons	180 36	361 63	57 45
5. Cartage and freight		27 61	286 83
6. Hire of teams and auto trucks		164 87	3,733 09
7. Heat			
8. Light and power		7,676 47	3,986 87
9. Lighting streets, alleys and parks			
10. Rent, taxes and water		362 53	
12. Premium on surety bond	6 00		86 24
13. Communication	50 52	170 97	205 75
14. Motor vehicle repairs and care	469 20	1,476 18	
15. Motorless vehicle repairs			27 20
16. Care of horses		623 49	
18. Cleaning		13 80	33 00
19. Removal of ashes, dirt and garbage			27 23
20. Disposal of ashes, dirt and garbage			
22. Medical			
23. Veterinary		30 00	
24. Blacksmith		1,442 57	
27. Testing materials and supplies			
28. Expert and architect			
32. Towing			287 50
35. Fees, service of venires, etc.	27 00	50 00	
36. Boiler inspection		15 00	40 00
37. Photographic and blueprinting		126 10	89 50
39. General plant	91 05	41,965 22	48,210 08
40. Harness, etc., repairs			
41. Horseshoeing and clipping		162 38	
42. Repairing streets, etc.			

Several Services by Items of the Segregated Budget.
to January 31, 1919.

Lighting.	Paving.	Sanitary.	Street Cleaning.	Sewer.	Water.	Totals.
\$6,092 62	\$702,285 54	\$463,599 59	\$448,130 01	\$216,517 47	\$546,909 92	\$2,879,181 56
.....	.....	235 50	.....	.....	4,947 00	20,731 87
.....	9,041 13	18,693 77	24,866 97	5,775 45	22,455 71	85,560 05
.....	.....	1,125 00	.....	109 20	124 90	3,098 08
31 00	419 77	56 90	111 80	272 83	695 07	1,985 90
.....	102 88	31 55	38 10	31 05	190 30	521 93
24 95	743 80	23 20	66	820 77	3,357 99	5,570 81
.....	43 17	6 96	535 85	24 82	128 51	1,063 75
.....	25,431 18	109,779 72	71,729 52	156 98	3,296 71	214,292 07
.....	.....	.....	.....	105 98	.....	105 98
.....	1,607 72	3,320 53	387 51	3,126 73	882 91	20,988 74
519,500 38	.....	.....	.....	.....	.....	519,500 38
.....	2,664 33	1,020 00	4,694 75	617 10	1,076 90	10,435 61
.....	9 00	3 00	.....	.....	12 50	116 74
.....	1,511 61	882 54	659 92	653 84	1,411 41	5,546 56
102 71	5,561 63	1,790 83	5,059 69	1,182 35	3,916 42	19,559 01
.....	539 77	4,294 45	7,596 01	203 41	662 64	13,323 48
.....	246 73	545 00	.....	.....	.....	1,415 22
.....	140 75	156 40	110 40	60,057 71	29 89	60,541 95
.....	.....	202,408 64	.....	77 00	.....	202,512 87
.....	.....	177,660 01	905 40	.....	.....	178,565 41
.....	30 00	10 00	.....	.....	.....	40 00
.....	356 20	483 88	272 38	114 25	197 60	1,454 31
.....	902 51	14 30	116 90	332 03	.....	2,808 31
.....	.....	.....	.....	.....	1,104 86	1,104 86
.....	.....	.....	.....	.....	4 50	4 50
.....	.....	.....	.....	900 00	.....	1,187 50
20 00	646 00	24 00	622 00	172 00	887 78	2,448 78
.....	70 00	.....	.....	17 00	10 00	152 00
.....	252 10	180 00	183 50	117 95	354 96	1,274 11
13,908 56	9,068 01	1,290 18	8,229 31	8,111 86	51,928 75	182,803 02
.....	340 85	.....	142 65	40 25	34 25	558 00
.....	4,782 90	2,921 64	3,552 72	676 97	1,577 68	13,674 29
.....	.....	.....	.....	.....	12,008 19	12,008 19

Expenditures Under the Maintenance Appropriation of the

GROUP AND ITEM.	Central.	Bridge.	Ferry.
C. EQUIPMENT:			
2. Machinery.....			
3. Electrical.....			
4. Motor vehicles.....	\$2,643 45	\$3,241 01	
5. Motorless vehicles.....			
6. Stable.....		7 35	
7. Furniture and fittings.....		113 80	\$65 00
9. Office.....			
11. Marine.....			668 28
13. Tools and instruments.....		574 33	2,865 76
14. Live stock.....			
16. Wearing apparel.....			
17. General plant.....		329 78	190 25
D. SUPPLIES:			
1. Office.....	1,658 88	973 08	1,002 32
2. Food and ice.....		117 66	27 35
3. Fuel.....		3,471 34	103,032 31
4. Forage and animal.....		1,204 50	
5. Medical, surgical, laboratory.....			
7. Veterinary.....			
8. Laundry, cleaning, toilet.....	2 03	110 66	923 41
11. Motor vehicle.....	466 64	776 46	
13. Chemicals and disinfectants.....		33 35	55 76
16. General plant.....		1,059 65	2,878 58
E. MATERIALS:			
1. Building.....		267 56	443 96
2. Highway.....			
3. Bridges.....		29,758 89	
4. Ferries.....			8,472 78
5. Sewer.....			
6. Water.....			
9. Machinery.....		236 18	
10. Electrical.....		375 05	363 26
13. General plant.....		138 37	106 94
F. SPECIAL ITEMS:			
2. Damages.....			
7. Pensions and annuities.....		5,397 18	8,574 43
11. Workingmen's compensation.....		818 00	204 00
12. Contracts for construction where money is derived from taxes as per Schedule B.....			
Totals.....	\$73,074 04	\$347,543 91	\$393,783 69

PUBLIC WORKS DEPARTMENT.

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Several Services by Items of the Segregated Budget.—*Concluded.*

Lighting.	Paving.	Sanitary.	Street Cleaning.	Sewer.	Water.	Totals.
	\$5,891 00			\$6,481 28		\$12,372 28
					\$1,924 91	1,924 91
\$112 38	2,555 07	\$809 05	\$2,259 49	1,721 19	7,697 79	21,039 43
	855 00	800 00	1,361 89	196 67	65 00	3,278 56
	950 14	49 30	463 53	178 26	82 15	1,730 73
	9 94	8 68			72 70	270 12
					166 67	166 67
						668 28
	7,258 10	1,410 82	5,964 90	1,451 04	22,759 61	42,284 56
		3,500 00	3,500 00		700 00	7,700 00
	156 59	19 88	60 53	794 45	336 03	1,367 48
	137 81	1 07	1,033 23	1,714 40	369 55	3,776 09
133 76	4,405 88	1,200 73	1,088 95	1,694 73	6,479 83	18,638 16
	145 65	70 18	20 08	82 21	32 65	495 78
	9,911 48	2,869 99	668 81	100,137 82	8,480 55	228,572 30
	31,901 60	54,066 45	55,233 05	7,083 55	11,640 32	161,129 47
				11 01		11 01
	134 75	91 45	107 74		63 97	397 91
	268 21	6 00	66 76	224 52	149 40	1,750 99
64 20	2,093 73	1,012 97	3,373 14	1,420 21	6,456 10	15,663 45
	110 22	54 00	125 90	339 80	29 30	748 33
	2,107 98	841 47	2,078 19	3,465 46	5,599 27	18,030 60
	906 36	333 59	28 59	1,680 14	131 22	3,791 42
	202,784 48		64,239 63			267,024 11
						29,758 89
						8,472 78
				4,872 87		4,872 87
					204,657 58	204,657 58
		50 42				286 60
	140 68			416 41	787 80	2,083 20
	10,050 48	20,029 40	8,667 21	726 59	2,567 01	42,286 00
					14,274 16	14,274 16
360 00	41,917 64	19,648 59	14,908 06	15,784 24	33,823 63	140,413 77
	2,140 28	9,531 57	2,442 84	1,618 86	1,649 42	18,404 97
					66,638 90	66,638 90
\$540,350 56	\$1,093,630 65	\$1,106,933 20	\$745,638 57	\$452,310 71	\$1,055,842 87	\$5,809,108 20

**Expenditures Under the Maintenance Appropriation of
From February 1, 1918,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Commissioner.....	\$9,000 00		
Division Engineers.....		\$3,750 00	\$1,250 00
Engineers in charge.....			
Chief clerk.....	2,991 56		
Clerks.....	47,337 05	2,807 64	663 34
Messengers.....			
Chief engineer (civil).....			
Assistant engineers (civil).....		7,653 27	
Draughtsmen.....		4,327 17	
Instrumentmen. (See transitmen).....			
Rodmen.....		1,212 92	
Inspectors.....		3,357 50	
Foremen.....			
Subforemen.....		3,831 74	
Investigator.....			
Address printer.....			
Blacksmiths and helpers.....			
Boilermakers.....			1,224 00
Blueprinters.....		1,062 12	
Boys.....	700 53		
Chauffeurs.....	1,092 00	3,479 00	525 00
Carpenters and helpers.....		14,762 30	4,699 25
Chief inspectors.....			
Chemist and assistant.....			
Claim agent.....	1,695 20		
Cashiers.....			1,795 04
Constable.....			
Coalpassers.....			
Chief engineer (steam).....			
Captains.....			19,825 19
Drawtenders and assistants.....		160,301 03	
Deckhands.....			22,563 24
Engineers (steam).....			16,794 51
Electricians.....		1,407 60	1,416 80
Emergency men.....			
Firemen. (See oilers).....			
Gatemen (ferry).....			16,921 41

the Several Services by Items of the Segregated Budget.
to January 31, 1919.

Lighting.	Paving.	Sanitary.	Street Cleaning.	Sewer.	Water.	Totals.
						\$9,000 00
\$1,250 00	\$3,750 00	\$1,250 00	\$1,250 50	\$1,027 77	\$5,000 00	18,537 77
	700 00			1,745 12	3,500 00	5,945 12
						2,991 56
1,560 80	13,744 59	555 96	390 22	2,665 78	54,601 20	124,326 58
	944 85				2,058 96	3,003 81
	1,200 00			1,200 00	1,200 00	3,600 00
	5,358 06			4,418 31	11,299 57	28,729 21
	649 37			2,821 80	2,838 75	10,637 09
				1,660 64		1,660 64
	2,666 53			345 50	1,288 41	5,513 36
	33,806 37	55,719 26	47,296 55	19,041 22	44,408 17	203,629 07
	20,869 16	12,565 28	17,950 40	5,143 75	22,465 18	78,993 77
	39,750 11			5,191 06	977 25	49,750 16
				1,461 14		1,461 14
					696 00	696 00
	6,952 55	12,055 86		1,926 00	3,765 95	24,700 36
						1,224 00
						1,062 12
	528 85					1,229 38
1,092 00	4,366 50	2,340 13	2,607 00	2,838 00	10,997 91	29,337 54
	20,516 50			4,158 00	8,103 00	52,239 05
	623 35		1,261 80			1,885 15
	211 83					211 83
						1,695 20
	1,495 52					3,290 56
	1,461 14					1,461 14
				7,807 87		7,807 87
				684 59		684 59
						19,825 19
						160,301 03
						22,563 24
	* 14,640 69			7,287 59	1,456 00	40,178 79
				1,426 00	1,435 20	5,685 66
				1,941 00	14,072 06	16,013 06
	7,073 75			9,616 19	2,388 00	19,077 94
						16,921 41

Expenditures Under the Maintenance Appropriation of the

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Veterinarian (chief).....			
Watchmen.....			
Wharfinger.....			
Weighers.....			
Wharfmen.....			
Wheelwrights and helpers.....			
Yardmaster.....			
Yardmen.....			
Permanent.....	\$66,282 42	\$234,331 24	\$195,032 75
Temporary.....			
Overtime.....		4,998 53	10,550 84
Other department work.....		4,301 98	425 04
Totals.....	\$66,282 42	\$243,631 75	\$206,008 63

Several Services by Items of the Segregated Budget.— *Concluded.*

Lighting.	Paving.	Sanitary.	Street Cleaning.	Sewer.	Water.	Totals.
.....	\$500 00	\$1,000 00	\$1,000 00	\$250 00	\$250 00	\$3,000 00
.....	12,804 75	7,000 00	.....	13,996 50	1,872 00	35,673 25
.....	.....	3,628 04	.....	.....	.....	3,628 04
.....	975 78	3,411 48	.....	.....	.....	4,387 26
.....	.....	3,012 50	.....	.....	.....	3,012 50
.....	.....	9,065 75	.....	.....	.....	9,065 75
.....	.....	.....	.....	.....	2,577 38	2,577 38
.....	7,931 00	.....	.....	2,625 50	6,923 50	17,480 00
\$6,092 62	\$702,285 54	\$463,599 59	\$448,130 01	\$216,517 47	\$546,909 92	\$2,879,181 56
.....	.....	235 50	.....	.....	4,947 00	20,731 87
.....	4,041 13	11,121 79	13,565 42	4,407 18	15,956 14	53,818 68
.....	5,000 00	7,571 98	11,301 55	1,368 27	6,499 57	31,741 37
\$6,092 62	\$711,326 67	\$482,528 86	\$472,996 98	\$222,292 92	\$574,312 63	\$2,985,473 48

Comparative Table Showing Cost of Maintenance of the * Street Department and Public Works Department Since 1909.

DIVISION AND SERVICE.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
Central Office.....	\$22,518 63	\$23,627 76	\$72,943 26	\$77,515 65	\$80,159 50	\$74,592 01	\$70,618 59	\$74,206 04	\$73,965 70	\$73,074 04
Bridge Service.....	198,852 71	201,995 00	274,876 76	268,959 44	271,423 04	283,066 41	269,283 23	277,847 65	305,144 31	323,801 28
Boston and Cambridge Bridges.....	18,464 72	22,006 57	21,055 26	17,183 87	17,744 48	18,645 52	17,765 44	18,945 39	21,163 98	23,942 63
Ferry Service.....	222,101 10	235,920 63	247,628 07	269,016 52	277,727 39	293,671 43	277,048 47	303,917 18	355,480 17	393,753 69
Lighting Service.....	719,574 91	710,294 84	726,967 18	768,779 08	795,880 53	753,811 73	739,599 62	772,769 97	773,541 76	540,350 56
Paving Service.....	1,089,247 94	1,178,546 90	1,162,660 20	1,236,686 20	1,361,082 17	1,223,364 69	1,029,374 44	802,150 73	949,803 41	1,006,628 46
Removal of snow.....	131,357 56	112,623 21	124,961 68	106,691 07	64,007 49	165,105 19	131,142 57	303,570 39	203,210 45	138,659 39
Sanitary Service.....	637,255 93	723,249 64	730,292 62	790,809 01	925,318 56	1,017,452 66	1,042,315 00	969,438 86	1,031,156 99	1,106,933 20
Sewer Service.....	301,145 94	312,541 05	325,508 86	378,873 18	387,120 67	362,672 07	339,446 62	322,199 03	379,483 30	452,310 71
Street Cleaning Service.....	353,550 33	370,602 81	408,571 72	454,623 71	492,324 45	472,730 69	489,959 90	428,899 28	516,475 67	556,830 98
Street Watering and Oiling Service.....	170,728 75	160,543 93	163,036 26	198,993 93	228,511 50	174,312 00	139,744 97	121,450 68	110,488 14	137,150 39
Water Service.....	.....	.....	822,377 46	835,072 00	899,338 91	894,170 14	904,135 19	917,823 64	1,045,543 65	1,055,842 87
Totals.....	\$3,864,798 52	\$4,051,952 34	\$5,080,879 42	\$5,403,203 75	\$5,800,638 69	\$5,733,594 54	\$5,450,434 30	\$5,313,218 84	\$5,765,457 53	\$5,809,108 20

* Engineering and Water Departments were consolidated into the Public Works Department February 1, 1911.

REVENUE.

Collected by City Collector on Account of the Public Works Department (Maintenance Account) and Credited to General Revenue, as per City Auditor.

Bridge Service:

Town of Milton for its share of cost of maintaining Granite Avenue Bridge	\$105 50
Mileage books and car tickets redeemed	19 53
Labor and material	53 16
Sale of old material	7 57
	<hr/>
	\$185 76

Charlestown Bridge:

Rents	1,531 48
Malden Bridge, from Boston Elevated Railway Company: Share of cost of construction	19,561 64
Spring Street Bridge, from town of Dedham: On account of cost of construction,	4,579 52
	<hr/>

\$25,858 40

Ferry Service:

Tolls	\$86,946 68
Headhouse privileges	400 00
Rent	533 83
Sale of old material	209 85
Commissions on telephone stations	103 89
Cleaning telephone booths	48 00
Free use of ferries, July 4	1 00
Sale of oil barrels	80 65
	<hr/>

88,323 90

Lighting Service:

Lighting Boston and Cambridge Bridges	\$2,261 64
	<hr/>

2,261 64

Paving Service:

Inspectors' services	\$6,304 19
Labor and materials furnished, etc.	5,041 17
From assessments on abutters for cost of laying sidewalks in front of their premises, including material for the same	28,099 83
Permits	10,630 46
	<hr/>

Carried forward \$50,075 65 \$160,443 94

<i>Brought forward</i>	\$50,075 65	\$116,443 94
Sale of old material	1,950 98	
Sale of crusher, Codman street	600 00	
Rents	150 00	
Removing dead horse	3 00	
Labor and materials, chapter 28, section 9, Revised Ordinances of 1914	1,892 02	
Use of roller	22 50	
Use of sweeper	22 00	
		54,716 15
Sanitary Service:		
For collection of commercial waste	\$72,140 77	
Sale of manure	567 47	
Sale of old scows	50 00	
Removal of dead horses	21 00	
Injury to horse	50 00	
Refund of amount drawn to pay annuity	25 00	
Damage to cart	1 00	
		72,855 24
Street Cleaning and Oiling Service:		
Removing dirt	\$1,335 25	
Rent	550 00	
Use of trucks	96 42	
Labor and materials	44 49	
Rebate on automobile registration,	5 00	
Sale of boiler	500 00	
Removal of dead horses	9 00	
		2,540 16
Sewer Service:		
Pumping sewage, amount re- ceived from Commonwealth	\$5,869 36	
Entrance fees	1,865 76	
Labor and materials furnished, etc.	287 24	
Sale of materials	209 44	
From assessments on sundry persons for their proportion of the cost of sewers built by the city	41 10	
Freeing drain	15 00	
Rent	10 00	
License to construct building	350 00	
		8,647 90
Assessments under chapter 450, Acts of 1899	\$47,341 39	
<i>Carried forward</i>	\$47,341 39	\$252,203 39

PUBLIC WORKS DEPARTMENT.

25

<i>Brought forward</i>	\$47,341 39	\$255,203 39
Interest on ditto	10,656 62	
		57,998 01
Separate Systems of Drainage:		
Assessments	\$14,977 18	
Interest on ditto	2,147 85	
		17,125 03
Water Service:		
Water rates due for the year 1918 and prior	\$2,947,943 02	
For the year 1919	50,979 71	
		2,998,922 73
Service pipes for new water takers, extending, repairing, etc.		
	\$8,535 28	
Labor, etc.	11,389 06	
Elevator and fire pipe connections	13,021 59	
Sale of materials	9,586 51	
Fees on overdue rates	4,688 20	
Shutting off and letting on water,	776 00	
Sale of horse	1 00	
Interest on deposits	577 02	
Sale of merchandise	434 39	
Extension of main pipes	835 84	
Testing meter	30 85	
Sale of gasoline	24 58	
Removal of dead horses	6 00	
Board of horses	623 49	
		50,529 81
		<u>\$3,379,778 97</u>

CONTRACTS MADE BY PUBLIC WORKS DEPARTMENT, FROM FEBRUARY 1, 1918, TO JANUARY 31, 1919.
Hired Team Contracts, from February 1, 1918, to January 31, 1919.

District.	Awarded to	Single, per Day.	Double, per Day.	Extra Men, per Day.	Auto Trucks, per Day.	Paving Service.	Sanitary Service.	Sewer Service.	Street Cleaning Service.	Total.
No. 1, South Boston and Dorchester North, ¹	Jeremiah J. McCarthy Com- pany.	\$4 00	\$5 00	\$3 50	\$35 00	\$3,026 50	.....	.....	.....	\$3,026 50
No. 2, East Boston and Breed's Island ¹	Edward J. McHugh, Jr.	4 00	5 50	3 00	20 00	969 25	.....	.....	.....	969 25
No. 3, Charlestown ¹	Northern Construction Com- pany.	5 00	6 50	3 50	35 00	.....	.....	.....	\$395 00	395 00
No. 4, Brighton ¹	John Kelly Company.....	3 00	7 00	3 00	25 00	2,443 00	.....	.....	.....	2,443 00
No. 5, West Roxbury ¹	John J. Moore.....	2 00	5 90	3 50	30 00	5,141 50	\$9,838 98	.....	6,585 45	21,565 93
Nos. 6-9, Dorchester and Ashmont ¹	John D. Lyons.....	4 00	6 50	3 50	20 00	4,839 25	.....	.....	.....	4,839 25
No. 7, Roxbury South and Jamaica Plain ¹ ..	John J. Moore.....	3 50	6 00	3 50	30 00	2,463 00	22,587 68	.....	.....	25,050 68
No. 8, South End and Roxbury North ¹	Northern Construction Com- pany.	4 00	5 50	3 50	35 00	6,757 12	25,318 00	.....	896 50	32,971 62
No. 10, North and West Ends and Back Bay ¹	Northern Construction Com- pany.	4 00	5 50	3 50	35 00	2,823 00	33,207 41	.....	8,168 50	44,198 91
No. 11, Hyde Park ¹	Thomas H. Corrigan.....	5 50	8 00	3 50	27 00	.....	.....	.....	.....	.....

¹ Advertised and awarded to lowest bidder.² Advertised and awarded to lowest bidder on doubles, second lowest bidder on angles.

BRIDGE AND FERRY DIVISION.—BRIDGE SERVICE.
Bridge Work.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1 Strengthening floor beams, Summer Street Bridge, across Fort Point channel; and Summer Street Bridge over A street.	Boston Structural Steel Company.	Feb. 18, 1918.	Completed April 3, 1918...	\$1,460 00	\$1,867 00
1 Planking the floor of the roadway of draw span, Congress Street Bridge, over Fort Point channel.	V. Grande.....	April 29, 1918.	Completed May 16, 1918...	4,070 00	4,490 81
1 Rebuilding the floor system of Broadway Bridge, over the Boston & Albany Railroad, city proper.	The Boston Bridge Works, Inc.	May 18, 1918.	Unfinished.....	52,535 00	Nothing.
1 Rebuilding the wooden flooring and relaying the granite block pavement on Chelsea Bridge North.	John P. Cavanagh Company...	May 21, 1918.	Unfinished.....	38,202 50	29,407 99
1 Repairing fixed span of Northern Avenue Bridge, over Fort Point channel, city proper.	Boston Structural Steel Company.	June 10, 1918.	Unfinished.....	3,745 00	Nothing.
1 Leasing storehouses at the approach of and under the new Charlestown Bridge.	Michael P. Coleman.....	July 1, 1918.	Unfinished.....	* 2,697 00	
1 Repairing draw span, Northern Avenue Bridge, ...	The Boston Bridge Works, Inc.	July 6, 1918.	Completed Oct. 1, 1918...	1,100 00	1,076 42
1 Repairing the floor of Broadway Bridge, over the New York, New Haven & Hartford Railroad, South Boston.	M. S. Kelliber.....	Sept. 6, 1918.	Unfinished.....	7,647 75	3,263 02
1 Rebuilding Belgrade Avenue Bridge, over the New York, New Haven & Hartford Railroad, West Roxbury.	West Roxbury Trap Rock Company.	Sept. 13, 1918.	Unfinished.....	43,500 00	Nothing.
1 Building additions to abutments, Norfolk Street Bridge, over New York, New Haven & Hartford Railroad, near Dorchester Station.	Daddario & Booth.....	Sept. 17, 1918.	Unfinished.....	5,400 00	Nothing.
1 Planking and paving Harvard Bridge, between Boston and Cambridge, over Charles river.	Rowe Contracting Company...	Nov. 27, 1918.	Unfinished.....	135,400 00	† 21,951 26

1 Advertised and awarded to lowest bidder.

* Paid to city.

* Wood slab pavement.

† One-half paid by City of Cambridge.

* Advertised and awarded to highest bidder.

* Only bid; not advertised.

* Per year.

BRIDGE AND FERRY DIVISION.—FERRY SERVICE.
Ferry Work.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1 Teaming coal from coal pockets and delivering same to ferryboats.	Edward J. McHugh, Jr.	Feb. 2, 1918.	Completed Jan. 31, 1919...	35 cents ton. (2,000 lbs.)	\$2,733 09
2 Weighing and vending machines in the ferry head-houses.	Auto Sales Corporation.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	\$400 00	400 00
3 Repairs and renewals to double screw ferryboat "General Sumner."	Boston Shipbuilding Company,	April 24, 1918.	Completed Oct. 29, 1919...	69,000 00	67,650 00
4 Furnishing and installing a new boiler on ferryboat "Hugh O'Brien."	The Hodge Boiler Works.....	May 29, 1918.	Unfinished.....	19,887 00	Nothing.
5 Rebuilding roadway floor of south drop at Boston landing of South Ferry.	John B. Dolan.....	June 14, 1918.	Completed July 27, 1918...	2,014 00	2,207 54
6 Repairing wharf at coal pocket, South Ferry, East Boston.	W. H. Ellis & Son Company...	July 2, 1918.	Completed July 26, 1918...	1,882 50	1,970 22
7 Repairing ferryboat "Hugh O'Brien."	The Atlantic Works.....	July 16, 1918.	Completed Nov. 30, 1918...	1,000 00	2,333 13
8 Rebuilding drop foundation and roadway supplementary of north drop at the East Boston landing of the North Ferry.	W. S. Rendle.....	Jan. 2, 1919.	Unfinished.....	3,145 00	778 84
9 Furnishing and installing heating system in head-house, South Ferry, Boston side.	Boston Consolidated Gas Company.	Jan. 8, 1919.	Unfinished.....	1,188 00	1,093 10

¹ Advertised and awarded to lowest bidder.

² Advertised and awarded to highest bidder.

³ Paid to city.

⁴ Only bid; not advertised.

HIGHWAY DIVISION.— LIGHTING SERVICE. **Contracts in Force Made in Previous Years.**

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1913.
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2					

DESCRIPTION OF LAMP.	Fixed Costs per Lamp per Year.	Running Costs per Lamp Hour.	DESCRIPTION OF LAMP.	Fixed Costs per Lamp per Year.	Running Costs per Lamp Hour.
40 candle power Inc. lamp, series.....	\$10 80	1½ cent.	100 candle power Inc. lamp, multiple.....	\$18 00	1½ cent
40 candle power Inc. lamp, multiple.....	12 00	1½ cent	500 candle power Inc. lamp, multiple.....	36 00	1½ cents
60 candle power Inc. lamp, series.....	12 00	1½ cent	425 watt A. C. arc lamp, multiple.....	36 00	1½ cents
60 candle power Inc. lamp, multiple.....	12 00	1½ cent	800 candle power Magnetite 500 watt D. C. arc lamp, series.....	36 00	1½ cents
100 candle power Inc. lamp, series.....	18 00	1½ cent			

A discount of 10 per cent is allowed from above rates.

A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is allowed for all outages.

The above are new prices which became effective on February 26, 1918, by decision of the Gas and Electric Light Commissioners.

Rebates for the preceding years, to the amount of \$147,746.25, were deducted from bills paid in 1918 to the Edison Electric Illuminating Company.

For further detail, see report of Lighting Service.

HIGHWAY DIVISION.—PAVING SERVICE. Artificial Stone Sidewalks, Rebate.*

CONTRACTOR.	Dated.	Contract Completed.	Price per Square Foot.	Amount Expended in Rebate in 1918.
William J. Rafferty & Co.	March 22, 1918.	January 31, 1919.	\$0 06	\$12 00
Jeremiah J. Sullivan.	March 22, 1918.	January 31, 1919.	06	Nothing.
Warren Brothers Company.	March 27, 1918.	January 31, 1919.	06	163 54
West Roxbury Trap Rock Company.	April 2, 1918.	January 31, 1919.	06	Nothing.
W. A. Murtfeldt Company.	April 2, 1918.	January 31, 1919.	06	\$441 66
Joseph A. Sugarella.	April 8, 1918.	January 31, 1919.	06	157 98
Martino DeMatteo.	April 8, 1918.	January 31, 1919.	06	77 88
Hervey F. Armington.	April 11, 1918.	January 31, 1919.	06	25 82
Joseph Lambiase.	April 12, 1918.	January 31, 1919.	06	138 96
John Landis.	April 12, 1918.	January 31, 1919.	06	191 28
Frank Drinkwater.	April 16, 1918.	January 31, 1919.	06	Nothing.
Standard Contracting Company.	April 17, 1918.	January 31, 1919.	06	\$167 36
Adams Pond Company.	April 24, 1918.	January 31, 1919.	06	305 64
J. C. Coleman & Sons Company.	April 24, 1918.	January 31, 1919.	06	Nothing.
C. W. Dolloff & Co.	April 24, 1918.	January 31, 1919.	06	Nothing.
A. J. Clapp.	May 2, 1918.	January 31, 1919.	06	Nothing.
Thomas J. Hind.	May 6, 1918.	January 31, 1919.	06	\$175 98
Joseph Rugo.	May 15, 1918.	January 31, 1919.	06	91 32
Stimpson Brothers Corporation.	May 15, 1918.	January 31, 1919.	06	66 06
W. J. Grosvenor & Co.	May 15, 1918.	January 31, 1919.	06	Nothing.
Pignat-Vicenzi Mosaic Company.	May 21, 1918.	January 31, 1919.	06	\$119 88
Galassi Mosaic and Tile Company.	May 29, 1918.	January 31, 1919.	06	Nothing.
Joseph Todesca.	June 6, 1918.	January 31, 1919.	06	Nothing.
George M. Crowell.	June 6, 1918.	January 31, 1919.	06	Nothing.
John Varnerin.	June 10, 1918.	January 31, 1919.	06	Nothing.
M. D. Russo & Co.	June 10, 1918.	January 31, 1919.	06	\$70 86
Stone & Webster.	July 23, 1918.	January 31, 1919.	06	266 16
John McCourt Company.	August 17, 1918.	January 31, 1919.	06	Nothing.
Charles M. Callahan.	September 17, 1918.	January 31, 1919.	06	Nothing.

* These walks are guaranteed by a surety company bond for five (5) years from date of completion, and were laid on various public streets where the contractors had agreements with the abutters. The price six (6) cents per square foot is equivalent to the expense to the city of one half the cost of a brick sidewalk.

Artificial Stone Sidewalks, Furnishing and Laying.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1 Amory street, northerly side, from opposite east side of Bradgon street, about 384 feet westerly, Roxbury.	Joseph A. Singarella.....	June 21, 1918.	Completed July 9, 1918.....	\$712 20	\$731 72
1 Radford lane, from Carruth street to Bushnell street, Dorchester.	Frank Drinkwater.....	July 2, 1918.	Unfinished.....	1,205 30	1,012 36
1 Hunnewell avenue, between Champney street and Atkins street; Fuller street, between Commonwealth avenue and the Brookline line, Brighton; Back street, southerly side, near Hereford street, city proper.	Pignat-Vicoeni Mosaic Company.	July 23, 1918.	Completed Aug. 28, 1918.....	1,589 30	1,604 60
1 Washington street, between Haymarket square and Elm street; Canal street, westerly side, at several places; Beach street, at No. 137.	V. Grande.....	Aug. 16, 1918.	Completed Sept. 11, 1918.....	1,229 13	1,269 45

1 Advertised and awarded to lowest bidder.

Sheet Asphalt Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1, 2 Park Vale avenue, between Brighton and Glenville avenues, Brighton.	The Bermudes Company...	July 2, 1918.	Completed Aug. 31, 1918.	(A) 656 cubic yards @ \$1.45 (B) 2 cubic yards @ 3.00 (C) 2 cubic yards @ 8.00 (D) 485 linear feet @ 0.40 (E) 70 linear feet @ 0.35 (F) 265 linear feet @ 0.28 (G) 5 square yards @ 1.00 (H) 5 square yards @ 2.25 (I) 2,540 square yards @ 2.80 (J) 4,730 square feet @ 0.33 (K) 122 square feet @ 0.35 (L) 350 Removing trees, etc., 100.00 \$10,221.20	\$951.20 6.00 16.00 247.65 24.50 74.20 5.00 11.25 7,112.00 1,560.90 41.22 122.50 100.00 \$10,670.87
1, 3 Saratoga street, between Chelsea and Bennington streets, East Boston.	The Bermudes Company...	Sept. 13, 1918.	Unfinished.	(E) 260 linear feet @ \$0.30 (F) 6,700 linear feet @ 0.28 (G) 100 square yards @ 1.25 (H) 26,200 square yards @ 3.42 (I) 73,100 square feet @ 2.75 (J) 660 square feet @ 0.35 (K) 15 square yards @ 3.50 (L) 238 square yards @ 3.50 (M) 100 square yards @ 0.60 (N) 60 square yards @ 0.28 (P) 2,620 linear feet @ 0.28 \$113,688.60	\$78.00 1,876.00 125.00 89,604.00 20,102.50 231.00 52.50 836.00 60.00 733.60 \$113,688.60

: Work done under chapter 393, Acts of 1906.

: Advertised and awarded to lowest bidder.

EXPLANATION OF LETTERS.

- (A) Earth excavation.
 (B) Excavation for water boxes and hydrants.
 (C) Rock excavation.
 (D) Straight edgestones hauled and set.
 (E) Circular edgestones set.
 (F) Edgestones reset.
 (G) Granite block paving relaid with gravel joints.
 (H) Granite block paving relaid with grout joints.
 (I) Furnishing and laying a 14-inch wearing surface and a 14-inch binder and concrete base and guaranteeing same for a period of five years after completion.
 (J) Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five years after completion.
 (K) Furnishing and laying artificial stone driveways and guaranteeing same for a period of five years after completion.
 (L) Removing trees.
 (M) Granite block paving relaid with grout joints for brows of car tracks.
 (N) Granite block paving relaid with grout joints for edgings and driveways.
 (O) Brick sidewalks relaid.
 (P) Straight edgestones set.

Granite Block Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
¹ Harrison avenue, between Kneeland and Dover streets, city proper.	Coleman Brothers.....	May 27, 1918.	Completed June 26, 1918....	\$23,351 30	\$25,289 36
¹ Sudbury street, between Court and Merrimac streets, city proper.	Simpson Brothers Corporation...	June 21, 1918.	Completed Sept. 14, 1918....	18,318 40	24,119 73
¹ Clinton street, between Merchants row and Commercial street; Cross street, between Commercial street and Haymarket square; Mercantile street, between South Market and Richmond streets, city proper.	Coleman Brothers.....	June 21, 1918.	Completed July 29, 1918....	52,382 10	54,598 60
¹ Dartmouth street, between Tremont and Stuart streets, city proper.	James Doherty.....	June 21, 1918.	Completed Nov. 4, 1918....	38,375 80	37,230 35
¹ Dorchester avenue, between Freeport and Park streets, Dorchester.	James Doherty.....	June 21, 1918.	Completed Dec. 1, 1918....	26,576 56	24,570 01
¹ Park street, between Tremont and Beacon streets; Somerset street, between Beacon street and Ashburton place; Tremont street, between Boylston and Common streets, city proper.	Warren Brothers Company.....	June 21, 1918.	Completed Aug. 14, 1918....	14,674 15	15,284 83
¹ Washington street, from Forest Hills to Archdale road, West Roxbury.	Simpson Brothers Corporation....	June 28, 1918.	Unfinished.....	74,221 50	38,332 60
² Albany street, between Kneeland street and Boston & Albany Railroad Bridge, city proper.	Coleman Brothers.....	July 13, 1918.	Completed Aug. 31, 1918....	41,666 75	45,523 65
¹ Congress street, between Atlantic avenue and Fort Point channel; Dorchester avenue, between Congress and Summer streets, city proper.	John E. Quinn.....	July 23, 1918.	Completed Sept. 3, 1918....	42,736 00	47,698 54
¹ Broadway, between Washington street and bridge over Boston & Albany Railroad, city proper.	James Doherty.....	July 30, 1918.	Completed Oct. 29, 1918....	16,273 85	11,520 90

Atlantic avenue, between Kneeland and Summer streets, city proper.	Coleman Brothers.....	July 30, 1918.	Completed Nov. 2, 1918....	58,813 50	64,176 80
State street, between Broad and India streets and between Commercial street and Atlantic avenue, city proper.	John E. Quinn.....	Aug. 22, 1918	Completed Oct. 18, 1918...	34,666 60	36,210 53
Atlantic avenue, between Broad and South Market streets, city proper.	Rosetti & Co.	Sept. 6, 1918.	Unfinished.....	73,078 50	71,813 78
Atlantic avenue, between South Market and Commercial streets, city proper.	D'Onofrio Brothers.....	Sept. 13, 1918.	Unfinished.....	74,410 70	39,052 93
Commercial and Causeway streets, between Hancock street and Washington Street North, city proper.	Bernard E. Grant.....	Sept. 13, 1918.	Unfinished.....	75,569 75	16,414 74
Dorchester avenue, between Rawson street and Savin Hill avenue, Dorchester.	William J. Barry.....	Sept. 17, 1918.	Unfinished.....	88,982 00	Nothing.
Atlantic avenue, between Summer and Broad streets, city proper.	Bernard E. Grant.....	Sept. 17, 1918.	Unfinished.....	103,868 15	22,286 46
Tremont street, between Common and Castle streets, city proper.	James Doherty.....	Sept 18, 1918.	Unfinished.....	33,499 60	Nothing.
Charles street, westerly side, between Beacon and Boylston streets, city proper.	James Doherty.....	Dec. 3, 1918.	Unfinished.....	5,524 00	4,508 09

* Including 950 square yards of fibbertine pavement, to be furnished and laid.
 * Lowest bidder for Rockport blocks.

* Advertised and awarded to lowest bidder.
 * Advertised and awarded to second lowest bidder.

Bitulithic Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1. : Norfolk street, between Corbet street and Blue Hill avenue, Dorchester.	Warren Brothers Company.	Aug. 16, 1918.	Completed Nov. 21, 1918.	(A) 5,300 cubic yards @ \$1 50 \$7,950 00 (B) 100 cubic yards @ 6 00 600 00 (C) 3,050 linear feet @ 0 33 1,006 50 (D) 81 linear feet @ 0 30 24 30 (E) 544 linear feet @ 0 22 119 88 (F) 1,350 linear feet @ 0 20 270 00 (G) 60 square yards @ 0 75 45 00 (H) 100 square yards @ 2 25 225 00 (I) 18,800 square yards @ 2 96 55,648 00 (J) 46,950 square feet @ 0 21 9,859 50 (K) 990 square feet @ 0 24 237 60 (L) Removing trees, etc., 1,500 00 \$77,485 58	\$81,406 86
1. : North Beacon street, between Cambridge and Market streets, Brighton.	Warren Brothers Company.	Aug. 24, 1918.	Unfinished.	(A) 6,000 cubic yards @ \$1 50 \$9,000 00 (B) 96 cubic yards @ 6 00 576 00 (C) 3,050 linear feet @ 0 35 1,067 50 (D) 550 linear feet @ 0 27 148 50 (E) 1,000 linear feet @ 0 23 230 00 (F) 300 square yards @ 0 90 270 00 (G) 12,180 square yards @ 2 90 35,322 00 (H) 56,520 square feet @ 0 22 12,434 40 (I) 1,760 square feet @ 0 25 440 00 (J) Removing trees, etc., 1,600 00 (K) 327 linear feet @ 0 35 114 45 (L) 615 square yards @ 2 71 1,666 55 (M) 70 square yards @ 2 61 182 70 \$63,052 20	\$45,935 37

East Broadway, between Dorchester and I. streets, South Boston.	Warren Brothers Company.	Oct. 17, 1918.	Unfinished.	(F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P)	4,230 linear feet 120 square yards 11,040 square yards 67,000 square feet 840 square feet 150 linear feet 1,920 square yards 58 square yards 100 square yards	@ \$0.40 @ 1.50 @ 3.77 @ 0.27 @ 0.31 @ 0.50 @ 4.32 @ 4.25 @ 0.60	\$1,692.00 180.00 41,630.80 18,090.00 260.40 75.00 8,204.40 238.00 60.00	Nothing.
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Advertised and awarded to lowest bidder.

Work done under chapter 393, Acts of 1906.

EXPLANATION OF LETTERS.

- (A) Earth excavation.
 (B) Rock excavation.
 (C) Edgestones hauled from South End Paving Yard and set.
 (D) Circular edgestones stored near the line of the work hauled and set.
 (E) Straight edgestones stored near the line of the work hauled and set.
 (F) Edgestones reset.
 (G) Granite block paving relaid with gravel joints.
 (H) Granite block paving relaid with grout joints, including concrete base.
 (I) Furnishing and laying a bitulithic pavement, including concrete base, and guaranteeing same for a period of five years after completion.
 (J) Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five years after completion.
 (K) Furnishing and laying artificial stone driveways and guaranteeing same for a period of five years after completion.
 (L) Removing trees, etc.
 (M) Circular edgestones set.
 (N) Granite block paving relaid with grout joints for brows of car tracks, including concrete base.
 (O) Granite block paving relaid with grout joints for edgings, including concrete base.
 (P) Brick sidewalks relaid.

Brick Block Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
'Arlington street, between Boylston street and St. James avenue, city proper.	Coleman Brothers.....	Nov. 25, 1918.	Completed Dec. 10, 1918.	800 square yards @ \$0 50 800 square yards @ 2 00 800 square yards @ 1 00 30 square yards @ 1 00 \$2,830 00	\$2,708 95

¹ Invitation bids; awarded to lowest bidder.

EXPLANATION OF LETTERS.

- (A) Excavation to be made and removed in doing the subgrading.
 (B) Concrete base to be furnished and laid.
 (C) Brick block paving to be laid with cement grout joints.
 (D) Granite block paving to be relaid with cement grout joints.

Topeka Pavement.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
Washington street, between Talbot avenue and Ashmont street, Dorchester.	Warren Brothers Company.	Aug. 17, 1918.	Completed Sept. 25, 1918.	(A) 30 tons @ \$3 50 \$105 00 (B) 1,180 linear feet @ 0 33 389 40 (C) 50 square yards @ 1 00 50 00 (D) 280 square yards @ 1 75 540 00 (E) 30 square yards @ 2 04 61 20 (F) 5,300 square yards @ 2 04 10,812 00 (G) 20 square yards @ 0 55 11 00 (H) 10,800 square feet @ 0 35 3,780 00 (I) 100 square feet @ 0 38 38 00 \$15,778 30	\$17,834 44
Tremont street, between Castle and Dover streets, city proper.	Rowe Contracting Company.	Sept. 17, 1918.	Unfinished.	(B) 920 linear feet @ \$0 40 \$368 00 (C) 150 square yards @ 1 50 225 00 (G) 20 square yards @ 0 50 10 00 (H) 11,450 square yards @ 0 35 4,007 50 (I) 90 square feet @ 0 35 31 50 (J) 37 linear feet @ 0 50 18 50 (K) 570 square yards @ 3 00 1,710 00 (L) 20 square yards @ 3 60 72 00 (M) 4,290 square yards @ 3 40 14,586 00 \$21,028 50	Nothing

¹ Advertised and awarded to lowest bidder.

EXPLANATION OF LETTERS.

- (A) Crushed stone, furnished and placed.
 (B) Edgestones reset.
 (C) Granite block paving relaid with gravel joints.
 (D) Granite block paving relaid for brows with grout joints.
 (E) Granite block paving relaid for edgings with grout joints.
 (F) Furnishing and laying a 2-inch Topeka pavement on macadam foundation and guaranteeing same for a period of five years after completion.
 (G) Brick sidewalks relaid.
 (H) Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five years after completion.
 (I) Furnishing and laying artificial stone driveways and guaranteeing same for a period of five years after completion.
 (J) Circular edgestones set.
 (K) Granite block paving relaid for brows of car tracks with grout joints, including concrete base.
 (L) Granite block paving relaid for edgings with grout joints, including concrete base.

Bituminous Macadam.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
¹ Goodale road, from Blue Hill avenue about 630 feet northwest- erly, Dorchester.	William J. Rafferty & Co.	July 11, 1918.	Completed Oct. 1, 1918.	\$5,083 52	\$6,381 64

¹ Advertised and awarded to lowest bidder.

HIGHWAY DIVISION.—PAVING SERVICE. Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
2 Repairing bituminous pavement on any street upon which the maintenance guaranty has expired.	The Bermudes Company.....	April 1, 1918.	Completed Jan. 31, 1919....	\$55,600 00	\$64,070 53
1 Sale of crushed stone bins, Codman street ledge....	Bernard E. Grant.....	April 23, 1918.	.....	350 00	350 00
1 Repairing artificial stone sidewalks on any street upon which the maintenance guaranty has expired.	Standard Contracting Company..	April 24, 1918.	Completed Jan. 31, 1919....	490 00	1,541 42
1 Relaying granite block pavement in Dorchester avenue in and near Andrew square and in Southampton and Boston streets, South Boston.....	Central Construction Company...	April 26, 1918.	.....	.....	* 14,393 56
1 Relaying granite block pavement in Dorchester avenue between West Second street and Old Colony avenue, and in adjoining streets, South Boston.	Central Construction Company...	April 27, 1918.	.....	.....	* 21,401 05
1 Recutting and redressing old granite blocks at Barton and Willard streets, city proper, East Fifth street lot, South Boston, Dorchester avenue, near South Station, and Massachusetts avenue lot.	William Toon.....	June 6, 1918.	.....	8,114 00	6,908 80
1 Removing trees, Bowdoin street, southerly side, between Winter and Church streets, Dorchester.	William J. Barry.....	July 19, 1918.	Completed August 9, 1918	900 00	900 00

¹ Advertised and awarded to lowest bidder.

² Advertised and awarded to second lowest bidder.

³ Only bid, not advertised.

⁴ Paid to city.

⁵ Invitation bids—awarded to lowest bidder.

This contract was made by the Boston Transit Commission, the Public Works Department to pay a part of the cost of relaying the granite block pavement with grout joints on a 6-inch concrete base.

* Paid to Transit Commission.

**SEWER AND SANITARY DIVISION.—SANITARY SERVICE.
Collecting and Removing House Offal.**

District.	Awarded to	Dated.	Progress of Work.	Price per Month.	Amount Expended in 1918.
¹ East Boston.....	Daniel P. Sullivan.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	\$499 00	\$5,489 00
¹ Brighton.....	Walter Griffin.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	387 00	4,128 00
¹ West Roxbury.....	D. P. Sullivan.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	349 00	3,839 00
¹ Dorchester.....	John J. Bradley.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	3,095 00	33,982 33
¹ Hyde Park.....	D. P. Sullivan.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	199 00	2,189 00

¹ Advertised and awarded to lowest bidder.

Collecting and Removing Ashes, Store Dirt, House Dirt and Refuse.

District.	Awarded to	Dated.	Progress of Work.	Price per Month.	Amount Expended in 1918.
¹ East Boston.....	East Boston Auto Contracting Company.	Feb. 2, 1918.	Completed Jan. 31, 1919...	\$1,250 00	\$13,474 88
¹ Brighton.....	McMurry Brothers.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	2,900 00	31,076 00
¹ West Roxbury.....	John J. Moore.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	990 00	11,104 50
¹ Dorchester.....	William J. Hunt.....	Mich. 1, 1918.	Completed Jan. 31, 1919...	6,175 00	62,301 00
¹ Hyde Park.....	Catherine F. Sexton.....	Feb. 2, 1918.	Completed Jan. 31, 1919...	349 00	3,865 04

¹ Advertised and awarded to lowest bidder.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1, 2 Removing manure from the various stables and yards of the department.	Joseph A. Kelley	Feb. 2, 1918.	Completed Jan. 31, 1919...	* \$1 10	\$618 24
3 Repairing Sanitary and Street Cleaning stable, 650 Albany street.	Connolly Construction Company.	Nov. 23, 1918.	Completed Dec. 20, 1918..	225 00	225 00

1 Advertisised and awarded to highest bidder.

2 Only bid; not advertised.

3 Paid to city.

* Per horse per year.

Contracts in Force Made in Previous Years.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
Disposal of refuse for ten years	Boston Development and Sanitary Company.	Feb. 1, 1912.	Unfinished	\$1,432,000 00	\$146,000 00

**SEWER AND SANITARY DIVISION.—STREET CLEANING AND OILING SERVICE.
Furnishing Carts for Watering and Oiling Streets.**

DISTRICT.	Awarded to	Dated.	Progress of Work.	PRICE PER CART PER DAY.		Amount Expended in 1918.
				Two-horse.	Three-horse.	
1 No. 1, South Boston and Dorchester North,	Joseph P. McCabe.....	April 8, 1918.	Completed Jan. 31, 1919...	\$7 20	\$7 20	\$4,059 00
1 No. 2, East Boston and Breed's Island....	Coleman Brothers.....	April 12, 1918.	Completed Jan. 31, 1919...	8 00	10 00	868 00
1 No. 3, Charlestown.....	Estate P. O'Riorden.....	April 8, 1918.	Completed Jan. 31, 1919...	8 00	9 50	1,820 00
1 No. 4, Brighton.....	Bernard Malone.....	April 8, 1918.	Completed Jan. 31, 1919...	8 00	9 00	3,340 00
1 No. 5, West Roxbury.....	George H. Noone.....	April 8, 1918.	Completed Jan. 31, 1919...	8 00	9 00	3,124 50
1 No. 7, Roxbury South and Jamaica Plain..	Joseph Sprisler.....	April 8, 1918.	Completed Jan. 31, 1919...	7 49	7 49	5,397 50
1 No. 8, South End and Roxbury North.....	F. R. Wilson.....	April 8, 1918.	Completed Jan. 31, 1919...	7 74	7 74	2,896 71
1 No. 10, North and West Ends and Back Bay.	Northern Construction Com- pany.	April 8, 1918.	Completed Jan. 31, 1919...	7 45	7 45	1,757 26
1 No. 11, Hyde Park.....	Thomas H. Corrigan.....	April 11, 1918.	Completed Jan. 31, 1919...	6 50	6 50	1,465 55

1 Advertised and awarded to lowest bidder.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
¹ Furnishing combination motor street sprinkling, flushing and oil-spreading trucks.	Bernard E. Grant.....	Feb. 2, 1918.	Completed Dec. 1, 1918....	* \$28 00	\$16,888 63
² Furnishing and operating electric sprinkler car for sprinkling and flushing street.	American Car Sprinkler Company.	June 10, 1918.	Completed Nov. 1, 1918....	† 1,400 00	6,883 33
¹ Installing street watering hydrants in various streets in Dorchester and South Boston.	John T. Shea, Jr.	July 23, 1918.	Unfinished.....	3,219 00	2,635 34

¹ Advertised and awarded to lowest bidder.² Only bid; not advertised.

* Per day.

† Per month.

Removing Snow and Ice.

DISTRICT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
¹ Snow District No. 1.....	Beatty Construction Company...	Dec. 26, 1918.	Expires May 1, 1919.....	\$0 54 per cubic yard.....	Nothing.
¹ Snow District No. 2.....	J. C. Coleman & Sons Company...	Jan. 7, 1919.	Expires May 1, 1919.....	57 per cubic yard.....	Nothing.
¹ Snow District No. 3.....	Bernard E. Grant.....	Dec. 26, 1918.	Expires May 1, 1919.....	59 per cubic yard.....	Nothing.
¹ Snow District No. 4.....	Coleman Brothers.....	Dec. 26, 1918.	Expires May 1, 1919.....	60 per cubic yard.....	Nothing.
¹ Snow District No. 5.....	Coleman Brothers.....	Dec. 26, 1918.	Expires May 1, 1919.....	60 per cubic yard.....	Nothing.
¹ Snow District No. 6.....	Bernard E. Grant.....	Dec. 26, 1918.	Expires May 1, 1919.....	50 per cubic yard.....	Nothing.
¹ Snow District No. 7.....	Michael H. Loonie.....	Dec. 27, 1918.	Expires May 1, 1919.....	50 per cubic yard.....	Nothing.

¹ Advertised and awarded to lowest bidder.

**SEWER AND SANITARY DIVISION.—SEWER SERVICE.
Cleaning Catch-Basins.**

District.	Awarded to	Dated.	Progress of Work.	Price per Cubic Yard.	Amount Expended in 1918.
No. 1, East Boston and Charlestown... No. 5, city proper.....	John W. Collins & Co.....	Feb. 2, 1918.	{ Completed } { Jan. 31, 1919. }	{ District No. 1..... } \$1 90 { District No. 5..... } 1 83	\$11,888 09
No. 2, South Boston and Dorchester... No. 3, West Roxbury and Hyde Park... No. 4, South End, Back Bay, Roxbury and Brighton.	Michael H. Loonie.....	Feb. 2, 1918.	{ Completed } { Jan. 31, 1919. }	{ District No. 2..... } \$1 67 { District No. 3..... } 1 67 { District No. 4..... } 1 97	33,906 79

¹ Advertised and awarded to lowest bidder.

Sewerage Works.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City	Amount Expended in 1918.
¹ Baid street, between Morton street and Blue Hill avenue, and outlet in Morton street, easterly side, between Harvard and Baird streets, Dorchester.	Daddario & Booth.....	June 5, 1918.	Completed Aug. 10, 1918....	\$4,495 45	\$4,325 67
¹ Pontiac street, between Cherokee and Hillside streets, and outlet in Cherokee street, from Pontiac street about 65 feet southeasterly, Roxbury.	John Guarino & Son.....	June 5, 1918.	Completed Aug. 10, 1918....	2,412 81	2,151 85
¹ Leverett street, between Charles and Green streets, city proper.	V. Grande.....	June 21, 1918.	Completed Oct. 11, 1918....	9,723 50	10,874 72
¹ Causeway street, between Beverly and Leverett streets, city proper.	Timothy Coughlin.....	June 21, 1918.	Completed Oct. 3, 1918.....	4,813 00	4,787 70
¹ Portland street, between Merrimac and Sudbury streets, city proper.	Antony Cefalo.....	June 25, 1918.	Completed Aug. 29, 1918....	6,596 20	7,670 53
¹ Atlantic avenue, between Kneeland and Commercial streets, and Commercial street, between Atlantic avenue and Prince street, city proper.	Anthony Baruffaldi.....	June 28, 1918.	Completed Sept. 20, 1918....	4,281 75	10,755 68
¹ Mason street, from 75 feet southwest of Almont street to Mattapan street, Dorchester.	George J. Regan.....	July 2, 1918.	Completed Sept. 12, 1918....	1,694 25	3,853 11
¹ Arboretum road, between Washington street and the New York, New Haven & Hartford Railroad; Lanesville terrace, between Arboretum road and Stony brook conduit, West Roxbury.	Antony Cefalo.....	July 3, 1918.	Completed Aug. 10, 1918....	3,463 75	2,088 70

¹ Advertised and awarded to lowest bidder.

Sewerage Works.—Continued.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City.	Amount Expended in 1918.
1 Washington street, between the New York, New Haven & Hartford Railroad and Archdale road, West Roxbury.	Frank Drinkwater.....	July 11, 1918.	Completed Oct. 11, 1918.....	\$7,242 50	\$9,180 84
1 Rockingham road, between Oakland street and Randolph road, Dorchester.	Frank Drinkwater.....	July 13, 1918.	Unfinished.....	2,026 50	2,202 77
1 Saratoga street, southerly side, from Trumbull street about 220 feet easterly, East Boston.	Antony Cefalo.....	July 23, 1918.	Completed Sept. 17, 1918.....	4,999 75	5,219 10
1 Dorchester avenue, between Savin Hill avenue and Rawson street, Dorchester.	Timothy Coughlin.....	July 23, 1918.	Completed Sept. 24, 1918.....	2,997 00	2,870 55
1 Building catch-basins, manholes, etc., in Broadway, between Dorchester and I. streets, South Boston; Broadway, between Washington street and Fort Point channel; Dartmouth street, between Tremont and Stuart streets; Sudbury street, between Court and Merrimac streets; Tremont street, between Common and Dover streets; Tremont street, near Compton street, city proper.	Bianco & Parenti.....	July 23, 1918.	Completed Dec. 11, 1918.....	5,096 50	13,915 22
1 Catherine street, between Florence and Meyer streets; Meyer street, from Catherine street 250 feet southeasterly, West Roxbury.	Dominick Vozzella.....	Aug. 13, 1918.	Unfinished.....	8,544 00	9,039 64
1 East Cottage street, between Dorchester avenue and Pond street; Pond street, between East Cottage street and Columbia road; Columbia road, between Pond and Greenhalge streets, Dorchester.	Anthony Baruffaldi.....	Aug. 17, 1918.	Unfinished.....	16,612 50	15,772 61
1 Hulbert street, between Ilay and Regent streets, Roxbury.	William J. Barry.....	Aug. 9, 1918.	Completed Aug. 27, 1918.....	1,800 00	1,235 73

1 Washington street, between Market and Tip Top streets, Brighton.	Antony Cefalo.....	Aug. 27, 1918.	Unfinished.....	28,646 20	31,208 86
2 Lubec street outlet at the Mead-Morrison plant, East Boston.	William J. Barry.....	Aug. 27, 1918.	Unfinished.....	310 00	Nothing.
3 Harvard street, from Brookview street about 120 feet northerly, Dorchester.	William J. Barry.....	Aug. 31, 1918.	Completed Sept. 19, 1918.....	800 00	687 92
1 Prospect street, between Fairmount and Milton avenues and outlet in Fairmount avenue, between existing sewer and Prospect street, Hyde Park.	George J. Regan.....	Oct. 2, 1918.	Completed Nov. 14, 1918.....	3,535 75	3,465 61
1 Green street, between Brookside avenue and Washington street; Union avenue, from Green street about 180 feet southwesterly, West Roxbury.	Vossella & Todesea.....	Oct. 10, 1918.	Unfinished.....	8,317 00	4,230 66
1 Rutherford avenue, between Chapman and Cambridge streets, Charlestown.	William Barrett & Co.....	Oct. 10, 1918.	Unfinished.....	48,120 00	3,559 03
1 Freeport street, from Union street about 160 feet southeast of Victory road, Dorchester.	William J. Barry.....	Oct. 17, 1918.	Unfinished.....	1,881 00	692 12
1 Princeton street, between Tufts and Lexington streets, Charlestown.	V. Grande.....	Oct. 17, 1918.	Completed Nov. 23, 1918.....	3,000 00	2,283 94
1 Cambridge street, between Mayflower street and Royal road, Brighton.	John McCourt Company.....	Nov. 21, 1918.	Completed Dec. 12, 1918.....	780 00	569 59
1 Ruxton road, between Rugby and Ridge roads, Dorchester.	John Guarino & Son.....	Nov. 21, 1918.	Unfinished.....	2,725 00	477 87
1 Bunker Hill street, between Tufts and Ferrin streets, Charlestown.	V. Grande.....	Nov. 21, 1918.	Unfinished.....	4,652 00	3,223 35
1 Archdale road and South street, between Washington and Lecher streets, West Roxbury.	Frank Drinkwater.....	Dec. 20, 1918.	Unfinished.....	5,404 25	Nothing.
2 Corey street, from Moulton street about 170 feet northerly, Charlestown.	William J. Barry.....	Dec. 31, 1918.	Unfinished.....	994 00	Nothing.

1 Advertised and awarded to lowest bidder.

2 Advertised and awarded to second lowest bidder.

3 Only bid; not advertised.

Miscellaneous — Sewer and Sanitary Division.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
Furnishing and installing metallic packing rings for high pressure plunger of No. 3 pump at the Calf Pasture pumping station, Dorchester.	William B. Merrill & Co.	July 3, 1918.	Completed Aug. 9, 1918.	\$576 00	\$576 00
Furnishing and installing four steel cages and iron chains for fifth hoist at the pumping station, Calf Pasture, Dorchester.	Smith & Lovett Company.	Nov. 1, 1918.	Unfinished.	3,950 00	Nothing.
Cleaning Canterbury branch of Stony brook, between Walk Hill and Harvard streets, and Stony brook, from Washington street to Canterbury branch of Stony brook, West Roxbury.	Charles M. Callahan.	Nov. 21, 1918.	Unfinished.	7,390 00	4,526 40
Repairing roofs of shops, Albany street yard.	Bernard Feneno Company.	Nov. 6, 1918.	Completed Jan. 29, 1919.	395 00	335 75

¹ Advertised and awarded to lowest bidder.

² Only bid; not advertised.

WATER DIVISION.—WATER SERVICE.
Water Pipes — Laying.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City.	Amount Expended in 1918.
West Fifth and West Sixth streets, South Boston.	James Barletta.....	Feb. 2, 1918.	Completed Aug. 15, 1918..	\$4,018 00	\$6,244 10
Tremont and Cuffin streets, and establishing gates in Washington street, Brighton.	Hugh McNulty.....	April 12, 1918.	Completed June 21, 1918..	2,739 00	3,222 95
Highland street, Milton avenue, Norway park, Neponset avenue, Dana avenue, Summit street and Washington street, Hyde Park.	Robert Esagar, Jr.....	April 16, 1918.	Completed Aug. 29, 1918..	5,252 50	5,807 64
Pontiac street, between Tremont and Hillside streets, Roxbury.	Frank Drinkwater.....	May 2, 1918.	Completed June 28, 1918..	1,779 00	1,429 25
Dent street, Elm street, Fletcher street, Harris avenue, Roanoke avenue, West Roxbury; Dunbar avenue, Fottler and Hiawatha roads, Dorchester.	James Barletta.....	May 3, 1918.	Completed Aug. 19, 1918..	4,900 50	4,949 72
Dorchester avenue, over New York, New Haven & Hartford Railroad tracks, South Boston.	John A. Costello & Co.....	June 6, 1918.	Completed Nov. 27, 1918..	1,797 50	1,551 69
Metropolitan avenue, Tyler street, Wood avenue and Ruskin road, Hyde Park.	Frank Drinkwater.....	June 21, 1918.	Completed Aug. 8, 1918...	1,605 00	2,383 25
Gold street, Silver street, Broadway, Athens street, West Third street, Bolton and West Second streets, and over New York, New Haven & Hartford Railroad bridges, South Boston.	Anthony Baruffaldi.....	July 2, 1918.	Unfinished.....	9,546 00	6,576 03
Parkman street, Brighton.....	Domenick Vozzella.....	July 19, 1918.	Completed Aug. 12, 1918..	661 25	582 05
Grove street, between Washington and Centre streets, West Roxbury.	Louis Martinello.....	July 23, 1918.	Unfinished.....	7,115 00	3,805 89

* Advertised and awarded to lowest bidder.

* Advertised and awarded to third lowest bidder.

* Advertised and awarded to second lowest bidder.

Water Pipes — Laying. — Concluded.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City.	Amount Expended in 1918.
¹ Harvey Steel road, Brighton.	M. DeSisto.	Aug. 14, 1918.	Completed Aug. 24, 1918.	\$717 50	\$679 50
² Devonshire street, from No. 270 to Summer street; Richmond street, from North street to No. 141; North street, from Fulton place to Richmond street; Friend street, from Hanover street to North street; city proper; West First street, between Colton and Granite streets; South Boston; Mt. Warren, Roxbury; Delano street, Salisbury park, Greenwood park and Cottage park, Dorchester.	Martino DeMatteo.	Oct. 2, 1918.	Unfinished.	5,895 00	3,488 60
³ Cedar and Manchester streets, private land and Consumptives' Hospital grounds, Dorchester; Wallace park, West Roxbury.	Charles M. Callahan.	Oct. 17, 1918.	Unfinished.	2,805 00	2,093 49
⁴ Orchard street, between Centre and Pond streets, and establishing gates and hydrants in Centre street, West Roxbury.	James Barletta.	Oct. 18, 1918.	Unfinished.	1,970 00	1,107 42
⁵ Allston street, from Brighton avenue to Commonwealth avenue, and Greylock road, from Allston street to Glenville avenue, Brighton.	James Barletta.	Oct. 18, 1918.	Unfinished.	2,788 00	2,254 05
⁶ Washington Street North, between Causeway street and Charles River; Purchase street, between Oliver and Pearl streets; Moite street, between Harrison avenue and Washington street; Broad street, between Atlantic avenue and India square; Northampton street, between Albany street and Harrison avenue, city proper.	John T. Shea, Jr.	Oct. 22, 1918.	Unfinished.	5,335 00	2,519 40
⁷ Burlington avenue, Roxbury; Custom House street, city proper.	James Barletta.	Nov. 25, 1918.	Unfinished.	822 50	598 49

¹ Invitation bids; awarded to lowest bidder.² Advertised and awarded to second lowest bidder.³ Advertised and awarded to lowest bidder.

Relaying Water Pipes.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost as per Estimated Quantities, not including Materials Furnished by City.	Amount Expended in 1918.
¹ East Sixth street, between L street and Farragut road; East Seventh street, between L and O streets; East Seventh street, between O street and Columbia road, South Boston.	Anthony Barufaldi.....	May 18, 1918.	Completed Sept. 3, 1918....	\$5,593 00	\$4,447 55
¹ East Broadway, between H and K streets; Emerson street, at East Broadway; I street, at East Broadway, South Boston; Utica street, between Kneeland and Beach streets; Atlantic avenue, between Foster's Wharf and India street; High street, between Purchase street and Atlantic avenue, city proper.	James Barletta.....	July 11, 1918.	Completed Oct. 5, 1918....	3,983 50	4,859 62

¹ Advertised and awarded to lowest bidder.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1918.
1 Installing service pipes, establishing branches, hydrants, gates, replacing boxes, etc., in a portion of District No. 2, comprising Wards 5 to 30, inclusive.	Thomas Burke.....	Mar. 27, 1918.	Completed Oct. 20, 1918.	\$15,880 00.	\$13,993 46
1 Cleaning water pipes in Cottage street, East Glenwood avenue, Foster, Garfield, Loring and Dana streets, Neponset avenue, Williams and Pond streets, Fairmount avenue, Water street, and in pumping station lot, Hyde Park.	National Water Main Cleaning Company.	June 21, 1918.	Completed Aug. 10, 1918.	\$3,435.00.	3,881 80
1 Furnishing water to the United States Navy at Forts Strong, Warren and Standish, and the fire control station on Deer Island, and to the War Department boats at Long Wharf.	City of Boston.....	July 1, 1918.	Completed June 30, 1919.	\$0.08 to \$0.14 per 100 cubic feet.	
1 Repairing water main in Boston Harbor, between Noon and Thompson's Island.	The T. A. Scott Company.....	Aug. 15, 1918.	Completed Sept. 9, 1918.	\$1,600.00.	1,570 82
2 Repairing water main in Boston Harbor, between Long and Spectacle Islands.	The T. A. Scott Company.....	Nov. 8, 1918.	Completed Nov. 16, 1918.	\$10,000.00.	9,077 60
Furnishing water to the United States Army at Robert Bent Brigham Hospital, Parker Hill avenue; Elks' Hospital, Parker Hill; Nurses' Home, Parker Hill; and Spring Street Hospital.	City of Boston.....	Oct. 10, 1918.	Completed June 30, 1918.	\$0.08 to \$0.14 per 100 cubic feet.	
Furnishing water to the United States Navy for Naval Reserve boats at Battery Wharf.	City of Boston.....	July 1, 1918.	Completed June 30, 1919.	\$0.08 to \$0.14 per 100 cubic feet.	
2 Repairing water main in Boston Harbor between Noon and Long Islands.	The T. A. Scott Company.....	Nov. 25, 1918.	Completed Dec. 10, 1918.	\$3,000.00.	1,769 94

1 Advertised and awarded to lowest bidder.

2 Only bid; not advertised.

The following table shows the snowfall and rainfall since 1912:

Snowfall (inches).

MONTH.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
January.....	17.8	0.3	10.3	7.0	4.8	13.1	13.8
February.....	0.2	7.7	20.6	5.1	30.3	8.9	5.7
March.....	2.0	0.5	5.2	T.	33.0	12.9	12.8
April.....	0.5	1.4	2.0	6.1	4.2	9.1	4.2
November.....	0.3	.....	.....	0.2	0.7	2.2	T.
December.....	9.2	0.9	4.1	6.7	9.5	7.0	8.4
Totals.....	30.0	10.8	42.2	25.1	82.5	53.2	44.9

Rainfall (inches).

MONTH.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
January.....	2.87	2.38	3.26	6.33	1.23	2.82	3.11
February.....	2.38	2.99	3.07	3.47	5.18	2.67	2.30
March.....	4.18	4.81	4.16	T.	3.20	3.73	3.19
April.....	3.07	4.77	5.87	1.86	4.51	2.72	3.08
May.....	4.04	3.22	2.78	1.64	2.83	4.45	1.99
June.....	0.27	0.64	1.40	1.39	5.04	4.05	1.94
July.....	5.16	2.69	2.64	8.85	5.67	1.10	2.64
August.....	1.94	2.86	3.20	5.63	2.19	7.06	1.56
September.....	1.67	2.51	0.21	0.69	1.90	1.91	9.19
October.....	1.00	6.04	1.54	2.82	0.94	5.33	0.99
November.....	2.61	2.15	2.72	2.14	1.67	0.59	1.20
December.....	5.36	3.05	3.46	3.94	3.00	2.56	3.21
Totals.....	34.55	38.11	34.31	38.76	37.36	38.99	34.40

In this rainfall is included the precipitation during the winter months, which equals one tenth of an inch to one inch of snowfall.

Area of Pavements.

The Following Table Shows Areas in Square Yards and Character of Pavements on Accepted Streets, February 1, 1919.

District.	Asphalt.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Bitulithic.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1917 report.....	566,567	2,391,397	240,367	39,132	115,108	25,199	294,326	6,913,275	571,398	143,216	11,298,985
Per cent.....	5.01	21.16	2.13	0.35	1.02	0.22	2.60	61.18	5.06	1.27	100.00
February 1, 1919.											
City proper.....	292,789	952,173	167,805	8,858	10,543	1,717	149,283	400,264	2,655	6,500	1,992,587
Charlestown.....	6,528	267,820	2,029	2,480	2,296	672	.....	159,928	275	591	442,619
East Boston.....	30,138	141,587	.....	1,817	950	.....	1,988	476,328	21,636	.....	674,444
South Boston.....	31,157	439,803	2,713	5,624	3,081	.....	18,113	396,919	14,820	40,103	951,333
Roxbury.....	93,820	330,304	25,403	1,417	50,373	2,514	47,320	1,068,012	24,706	945	1,644,814
West Roxbury.....	39,241	58,491	583	2,360	.....	3,958	35,610	1,434,761	76,481	43,899	1,695,384
Dorchester.....	52,581	219,845	38,553	5,594	47,846	1,735	68,281	1,783,613	100,242	12,116	2,330,406
Brighton.....	75,938	40,651	3,675	3,847	.....	15,466	28,607	747,223	61,796	7,777	984,980
Hyde Park.....	14	1,656	.....	5,302	.....	.....	.....	349,495	235,115	21,548	613,130
Totals.....	* 622,206	† 2,452,330	240,761	37,299	115,089	† 26,062	‡ 349,202	|| 6,815,543	537,726	133,479	11,329,697
Per cent.....	5.49	21.64	2.13	0.33	1.01	0.23	3.08	60.16	4.75	1.18	100.00

NOTE.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

* Of this amount 774 square yards equal asphalt blocks.

† Of this amount 841,029 square yards equal granite block paving on concrete base and 1,130 square yards equal cobble.

‡ Of this amount 672 square yards equal Hassan concrete pavement and 946 square yards equal Blome Granitoid concrete blocked pavement and 1,250 square yards equal Roman road pavement.

§ Of this amount 1,014 square yards equal Endurite and 959 square yards equal fibertine and 46,391 square yards equal Topelka.

|| Of this amount 1,997,243 square yards equal bituminous macadam.

¶ Of this amount 30,325 square yards public alleys included in this table.

‡ Of this amount 273,748 square yards public streets in charge of Park and Recreation Department included in this table.

§ Of this amount 48,474 square yards public streets in charge of the Commonwealth of Massachusetts included in this table.

|| In addition to this table there are 6,719 square yards of accepted footways.

Public streets laid out or discontinued by the Street Commissioners during the year show pavements decreased 0.02 mile but increased 19,147 square yards.

The abolition of the grade crossing of the New York, New Haven & Hartford Railroad at West First street, by abandoning for highway purposes a portion of West First street, shows pavements decreased 0.06 mile or 1,033 square yards.

The building of Malden Bridge — relocation of Alford street — shows pavements increased 243 square yards.

Street changes made by the Boston Transit Commission for the Dorchester Tunnel show pavements decreased 0.03 mile or increased 831 square yards.

The relocation of roadways in Commonwealth avenue from Massachusetts avenue to Charlesgate West by the Park and Recreation Department shows pavements increased 2,470 square yards.

The widening of the roadway in Charles street in front of the Public Garden shows pavements increased 1,285 square yards.

The widening of the roadway in Brookline avenue at Audubon road shows pavements increased 595 square yards.

Corrections to previous measurements on account of revisions and other causes show pavements increased 0.06 mile or 6,074 square yards.

Total net decrease 0.05 mile or increase 29,712 square yards.

The rate of increase from year to year is shown in the following table:

	Miles.		Miles.		Miles.
1859.....	111.50	1887.....	390.30	1904.....	500.39
1871.....	201.32	1888.....	392.72	1905.....	502.20
1872.....	207.40	1889.....	397.84	1906.....	502.80
1873.....	209.24	1890.....	404.60	1907.....	510.04
1874.....	313.90	1891.....	409.60	1908.....	511.60
1875.....	318.58	1892.....	434.59	1909.....	514.28
1876.....	327.50	1893.....	443.34	1910.....	518.63
1877.....	333.20	1894.....	447.65	1911.....	521.21
1878.....	340.39	1895.....	452.12	1912.....	561.36
1879.....	345.19	1896.....	456.11	1913.....	567.51
1880.....	350.54	1897.....	459.12	1914.....	572.85
1881.....	355.50	1898.....	471.19	1915.....	584.55
1882.....	359.85	1899.....	479.47	1916.....	593.62
1883.....	367.99	1900.....	489.55	1917.....	596.19
1884.....	374.10	1901.....	491.85	1918.....	601.12
1885.....	379.60	1902.....	496.90	1919.....	601.07
1886.....	383.55	1903.....	499.85		

Length of Pavements.

The Following Table Shows Length in Miles and Character of Pavements on Accepted Streets, February 1, 1919.

District.	Asphalt.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Bitulithic.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1917 report.....	34.01	103.11	9.74	1.84	5.46	1.78	14.64	380.04	37.10	3.40	601.12
Per cent.....	5.66	17.15	1.62	0.31	0.91	0.30	2.43	64.88	6.17	0.57	100.00
February 1, 1919.											
City Proper.....	18.12	41.04	6.71	0.37	0.56	0.20	6.38	21.71	0.22	0.22	95.53
Charlestown.....	0.41	11.91	0.08	0.11	0.10	0.03	.....	10.74	0.02	.....	23.40
East Boston.....	1.24	6.62	.....	0.11	0.04	.....	0.11	23.08	1.13	.....	32.33
South Boston.....	2.48	18.53	0.18	0.24	0.13	.....	1.03	20.94	0.79	1.46	45.78
Roxbury.....	5.24	14.00	1.17	0.05	2.69	0.17	2.42	62.77	2.05	0.05	90.70
West Roxbury.....	2.70	2.27	.....	0.11	.....	0.32	2.14	86.23	4.78	0.31	98.86
Dorchester.....	3.47	9.49	1.55	0.24	1.94	0.09	3.39	105.39	6.24	0.31	132.11
Brighton.....	2.37	0.65	0.08	0.21	.....	1.05	1.39	37.10	4.22	0.16	47.23
Hyde Park.....	.....	0.08	.....	0.30	.....	.....	.....	19.01	15.50	0.24	35.13
Totals.....	* 36.03	† 104.68	9.77	1.74	5.46	† 1.86	§ 16.86	|| 386.97	34.95	2.75	601.07
Per cent.....	5.99	17.42	1.62	0.29	0.91	0.31	2.81	64.38	5.81	0.46	100.00

NOTE.— In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline included in city proper.
 * Of this amount 91.45 miles equals granite block paving on concrete base, and 0.012 mile equals cobble.
 † Of this amount 0.03 mile equals Roman concrete pavement, and 0.06 mile equals Blome Granitoid concrete blocked pavement, and 0.08 mile equals Roman road pavement.
 ‡ Of this amount 0.00 mile equals Enclurite, and 0.06 mile equals fibbertine, 2.54 miles equals Topyka.
 § Of this amount 100.91 miles equals Enclurite, and 0.06 mile equals bituminous macadam.
 || Of this amount 91.45 miles equals asphalt blocks.
 ¶ Of this amount 0.27 miles public alleys included in this table.
 § Of this amount 0.27 miles public streets in charge of Park and Recreation Department included in this table.
 || Of this amount 1.61 miles public streets in charge of the Commonwealth of Massachusetts included in this table.
 In addition to this table there are 1.31 miles of accepted footways.

The following changes in pavement were made during the year:

0.00 mile or 670 square yards asphalt changed to granite block.
 0.04 mile or 162 square yards asphalt changed to concrete.
 0.00 mile or 29 square yards asphalt changed to bitulithic.
 0.01 mile or 388 square yards granite changed to asphalt.
 0.00 mile or 44 square yards granite block changed to wood block.
 0.04 mile or 888 square yards granite block changed to brick.
 0.00 mile or 3 square yards granite block changed to bitulithic.
 0.02 mile or 72 square yards granite block changed to Topeka.
 0.00 mile or 27 square yards cobble changed to granite block.
 0.00 mile or 8 square yards wood block changed to asphalt.
 0.04 mile or 548 square yards wood block changed to granite block.
 0.00 mile or 17 square yards wood block changed to brick.
 0.05 mile or 1,145 square yards plank on bridges changed to granite block.
 0.05 mile or 800 square yards plank on bridges changed to wood block.
 0.00 mile or 85 square yards brick changed to granite block.
 0.04 mile or 70 square yards brick changed to concrete.
 0.32 mile or 5,097 square yards bitulithic changed to asphalt.
 0.00 mile or 10 square yards bitulithic changed to granite block.
 0.00 mile or 42 square yards bitulithic changed to wood block.
 0.02 mile or 120 square yards bitulithic changed to macadam.
 1.36 miles or 41,890 square yards macadam changed to asphalt.
 1.60 miles or 51,446 square yards macadam changed to granite block.
 0.02 mile or 119 square yards macadam changed to wood block.
 1.61 miles or 31,319 square yards macadam changed to bitulithic.
 0.61 mile or 14,501 square yards macadam changed to Topeka.
 0.06 mile or 959 square yards macadam changed to filbertine.
 0.36 mile or 8,754 square yards gravel changed to asphalt.
 0.07 mile or 1,892 square yards gravel changed to granite block.
 0.05 mile or 645 square yards gravel changed to bitulithic.
 0.19 mile or 2,599 square yards gravel changed to Topeka.
 1.66 miles or 28,599 square yards gravel changed to macadam.
 0.03 mile or 459 square yards not graded changed to asphalt.
 0.00 mile or 812 square yards not graded changed to granite block.
 0.04 mile or 8,159 square yards not graded changed to bitulithic.
 0.00 mile or 289 square yards not graded changed to Topeka.
 0.34 mile or 7,177 square yards not graded changed to macadam.
 0.28 mile or 11,672 square yards not graded changed to gravel.

Streets laid out or discontinued by the Street Commissioners during the year show:

Asphalt decreased 0.00 mile or 16 square yards.
 Granite block decreased 0.08 mile or 637 square yards.
 Plank on bridges increased 0.00 mile or 154 square yards.
 Macadam decreased 0.09 or 914 square yards.
 Gravel increased 0.11 mile or 1,030 square yards.
 Not graded increased 0.04 mile or 19,530 square yards.

The abolition of the grade crossing of the New York, New Haven & Hartford Railroad at West First street, by abandoning for highway purposes a portion of West First street, shows:

Granite block decreased 0.06 mile or 1,033 square yards.

The building of Malden Bridge — relocation of Alford street — shows:

Granite block increased 0.00 mile or 343 square yards.

Street changes made by the Boston Transit Commission for Dorchester Tunnel show:

Granite block decreased 0.01 mile or increased 831 square yards.
Macadam decreased 0.02 mile.

The relocation of roadways in Commonwealth avenue, from Massachusetts avenue to Charlesgate West, by the Park and Recreation Department shows:

Granite block increased 0.00 mile or 1,144 square yards.
Bitulithic increased 0.00 mile or 1,326 square yards.

The widening of the roadway in Charles street in front of the Public Garden shows:

Granite block increased 0.00 mile or 1,285 square yards.

The widening of the roadway in Brookline avenue at Audubon road shows:

Macadam increased 0.00 mile or 595 square yards.

Corrections on account of revision and other causes show:

Asphalt decreased 0.02 mile or 80 square yards.
Granite block increased 0.03 mile or 3,787 square yards.
Wood block decreased 0.00 mile or 38 square yards.
Plank on bridges decreased 0.00 mile or 42 square yards.
Brick decreased 0.00 mile or 138 square yards.
Bitulithic decreased 0.02 mile or 106 square yards.
Endurite increased 0.00 mile or 350 square yards.
Macadam increased 0.28 mile or 6,925 square yards.
Gravel decreased 0.21 mile or 3,885 square yards.
Not graded decreased 0.00 mile or 699 square yards.

LIST OF PERSONAL PROPERTY ON HAND JANUARY 31, 1919, AND
ESTIMATED VALUE OF SAME, ALLOWING FOR DEPRECIATION.

Central Office.

1 automobile	.	.	.	.	.	.	.	\$1,700 00
2 robes	.	.	.	.	.	.	.	20 00
Office supplies	.	.	.	.	.	.	.	500 00
								<hr/>
								<u>\$2,220 00</u>

Bridge Service.

3 horses	\$750 00
4 wagons	180 00
4 buggies	140 00
3 harnesses	30 00
5 blankets	5 00
5 robes	15 00
2 automobiles	1,300 00
3 auto trucks	1,600 00
Supplies, tools and machinery	12,000 00
	<hr/>
	\$16,020 00

Ferry Service.

7 ferryboats	\$184,668 00
Supplies, tools and machinery	17,042 00
	<hr/>
	\$201,710 00

Lighting Service.

9,716 lamp-posts	\$97,160 00
300 lamp brackets	300 00
2 automobiles	400 00
1 robe	10 00
1 typewriter	50 00
	<hr/>
	\$97,920 00

Paving Service.

1 large concrete mixer	\$3,000 00
5 small concrete mixers	2,000 00
2 bituminous mixers	6,600 00
227 harnesses	2,270 00
6 automobiles	1,700 00
240 blankets	240 00
21 buggies	315 00
13 pungs	260 00
7 sleighs	70 00
13 jiggers	520 00
17 wagons	680 00
11 street watering carts	1,650 00
7 road scrapers	2,450 00
84 dump carts, 66 single, 18 double	7,560 00
103 horses	25,750 00
13 snow levels	390 00
6 section rollers	300 00
	<hr/>
<i>Carried forward</i>	\$55,755 00

<i>Brought forward</i>	\$55,755 00
9 steam rollers	13,500 00
30 desks	300 00
1,123 picks	561 00
1,961 shovels	980 00
7 scarifiers	2,450 00
Supplies, tools, machinery, surveying instru- ments, engineers' supplies, etc.	75,000 00
	<hr/>
	<u>\$148,546 00</u>

Sanitary Service.

2 automobiles	\$300 00
3 auto trucks	500 00
287 horse blankets	287 00
18 buggies	450 00
215 carts	21,500 00
303 shovels	151 00
178 harnesses	3,560 00
164 horses	41,000 00
94 wagons	9,400 00
17 desks	170 00
9 sleighs	90 00
70 pungs and sleighs	1,400 00
Supplies, tools, machinery, etc.	40,000 00
	<hr/>
	<u>\$118,808 00</u>

Street Cleaning and Oiling Service.

8 automobiles and 3 trucks	\$1,700 00
133 carts	13,300 00
16 buggies	320 00
30 street watering carts	3,000 00
10 wagons	800 00
229 harnesses	4,580 00
170 horses	42,500 00
43 street sweeping machines	6,450 00
12 flushing machines	4,800 00
136 push carts	1,360 00
1,418 street-sweeping brooms	1,418 00
673 shovels	336 00
643 picks	321 00
15 snow plows and 8 road machines	3,450 00
Supplies, tools, machines, etc.	20,000 00
	<hr/>
	<u>\$104,335 00</u>

Sewer Service.

505 picks	\$252 00
7 automobiles	2,150 00
27 horses	6,750 00
25 wagons	1,250 00
8 buggies	160 00
17 carts	1,360 00
53 harnesses	530 00
50 blankets	50 00
10 sleighs	100 00
417 shovels	208 00
64 pails	32 00
Derricks, centrifugal pumps, dynamo, boilers, engineers' tools, machinery, instruments and supplies, etc.	385,000 00

\$397,842 00
Water Service.

1 motor cycle	\$50 00
10 automobiles and 17 trucks	13,800 00
33 horses	8,250 00
29 wagons	1,450 00
6 buggies	120 00
4 sleighs	60 00
11 pungs	110 00
Shovels, picks and miscellaneous stock, consist- ing of all kinds and sizes of iron water pipe, meters, hydraulic machinery, boiler, etc.	485,000 00

\$508,840 00

Real Property in Charge of the Bridge and Ferry Division.— (Bridge Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
170 Broadway extension, South Boston, 5,510 feet of land on Broadway extension and Dorchester avenue, on which is a brick building containing an office, workshop and stable; 1,176 square feet of this land is occupied by a convenience station. The equipment has been removed to 710 Albany street.	\$1 75	\$9,600 00	\$25,500 00	\$35,100 00
LOCATION.				
Estimated Value of Buildings.				
BROADWAY BRIDGE.				
Draw house and one storehouse.....	Draw house, \$800; storehouse, \$200.....			\$1,000 00
CHARLESTOWN BRIDGE.				
Draw house, electrical power room and six storehouses *	Draw house, \$3,000; power room, \$1,000.....			4,000 00
CHELSEA BRIDGE NORTH.				
Draw house.....	\$300.....			300 00
CHELSEA BRIDGE SOUTH.				
Draw house, engine house and surface draw house.....	Draw house, \$1,500; engine house, \$100.....			1,600 00

* Five leased to M. P. Coleman for \$2,697 per year, lease expires January 31, 1922.

Real Property in Charge of the Bridge and Ferry Division.—(Bridge Service.)—Continued.

LOCATION.	Estimated Value of Buildings.	Total Value.
CHELSEA STREET BRIDGE.		
Draw house.....	Draw house, \$1,800.....	\$1,800 00
CONGRESS STREET BRIDGE.		
Draw house, storehouse and two shelter houses.....	Draw house, \$1,000; storehouse, \$100; shelter house \$500.	1,600 00
DOVER STREET BRIDGE.		
Draw house and two shelter houses.....	Draw house, \$1,000; shelter house, \$500.....	1,500 00
DORCHESTER AVENUE BRIDGE.		
Draw houses, tool sheds, two motor houses and one controller house.....	Draw house, \$1,000; motor houses, \$300; tool house, \$250; controller house, \$25.	1,525 00
GRANITE AVENUE BRIDGE.		
Tool house and controller house.....	Tool house, \$100; controller house, \$100.....	200 00
L STREET BRIDGE. (Now called Summer Street.)		
Draw house and engine house.....	Draw house, \$1,000; engine house, \$500.....	1,500 00
MALDEN BRIDGE.		
Draw house owned by Boston Elevated Railway Company. Some maintenance charges borne by City of Boston.		
MERIDIAN STREET BRIDGE.		
Draw house and tool house.....	Draw house, \$2,500; tool house, \$100.....	2,600 00

Real Property in Charge of the Bridge and Ferry Division.— (Bridge Service.)— Concluded.

Location.	Estimated Value of Buildings.	Total Value.
<p align="center">NAPOLEON BRIDGE.</p> <p>Tool house. Control of this bridge taken over by Metropolitan Park Commission October 28, 1918.</p>		
<p align="center">NORTHERN AVENUE BRIDGE.</p> <p>Draw house, containing a power room and storage room for compressed air and tool house.....</p>	<p>Draw house, \$4,500; tool house, \$100.....</p>	<p>\$4,600 00</p>
<p align="center">SUMNER STREET BRIDGE.</p> <p>Draw house, controller house, two shelter houses and tool house.....</p>	<p>Draw house, \$3,000; controller house, \$250; shelter houses, \$500; tool house, \$100.</p>	<p>3,850 00</p>
<p align="center">WARREN BRIDGE.</p> <p>Stable, draw house, containing an engine room and boiler room and a tool house.....</p>	<p>\$3,500.....</p>	<p>3,500 00</p>
<p>Warren avenue, between Water street and the railroad, used by Election Department for storage of election booths.</p>		
<p align="center">WESTERN AVENUE BRIDGE TO WATERTOWN.</p> <p>Tool house.....</p>	<p>\$200.....</p>	<p>200 00</p>

Real Property in Charge of the Bridge and Ferry Division.— (Ferry Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
South Ferry, East Boston side, located at the termination of Lewis street. On these premises are one headhouse with canopies, one workshop for carpenters, machinists and blacksmiths, one storehouse, one coal pocket, three piers which form the two slips, two drops and tanks, one wharf and dock.	* 33,196 at \$1 75 † 4,700 at 2 00 † 16,879 at 1 50 † 2,000 at 1 75	\$86,300 00	\$43,000 00	\$139,300 00
South Ferry, Boston side, located at the termination of Eastern avenue. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks.	25,500 at 2 00	51,100 00	74,900 00	126,000 00
North Ferry, East Boston side, located at the termination of Border street. On these premises are one headhouse with canopies, one boiler, one coal pocket, three piers which form the two slips and two drops and tanks.	† 18,876 at 2 00 * 42,262 at 1 75	111,800 00	58,000 00	169,800 00
North Ferry, Boston side, located at the termination of Battery street. On these premises are one head house with canopies, one gate room, three piers which form the two slips and two drops and tanks.	† 10,511 at 3 50 * 34,600 at 2 00	106,000 00	69,000 00	175,000 00
† Eastern avenue, No. 60, adjoining South Ferry Headhouse, Boston side. Upon this lot is a house and office building owned by Patrick J. Connolly.				

* Wharves and docks.

† Solid.

† Land leased to Patrick J. Connolly for \$200 per year.

Real Property in Charge of the Highway Division.—(Lighting Service.)

LOCATION.	Estimated Value of Land.	Estimated Value of Buildings.	Total Value.
Lot of land, containing 8,000 square feet at 690 Albany street. Used by Sewer and Water Services.....	\$10,000 00	\$1,000 00	\$11,000 00

Real Property in Charge of the Highway Division.— (Paving Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
Columbia road, corner of H street, stable, carriage house, shed, tool house and office built by the city on land containing 12,017 square feet, rented from William H. Hart.	\$0 40	\$4,800 00	\$900 00	\$5,700 00
Columbia road, corner Hamlin street, lot of land used for storage purposes, containing 6,710 square feet, owned by Frank E. Briggs and rented from Charles P. Mooney, agent.	25	1,800 00	.....	1,800 00
EAST BOSTON.				
East Eagle street, corner Glendon street, sheds, stable and office building erected by the city on wharf property containing 326,700 square feet, owned by Renton Whidden, for the sum of \$1,800 a year. This property is used jointly with the Sewer, Sanitary, Street Cleaning and Oiling Services and Water Service.*	.....	130,100 00	8,300 00	138,400 00
CHARLESTOWN.				
Medford street, foot of Elm street, wharf property containing 44,700 square feet (Sur. Prog. 968), owned by the city. Upon this lot are a shed, stable and office building.	75	33,400 00	8,600 00	42,000 00
BRIGHTON.				
Chestnut Hill avenue, ledge lot containing 569,776 square feet (L 1,630), purchased in 1882 by the city. Upon this lot are stone crusher, stable shed and office building and oil plant.	15	79,800 00	5,500 00	85,300 00
WEST ROXBURY.				
Child street, lot of land containing 43,024 square feet, owned by the city. Upon this lot are sheds, stable and office building. (See Sewer Service.)	45	19,300 00	3,500 00	22,800 00
Morton street, near Canterbury street, lot of land containing 14,484 square feet, owned by the city and used for storage purposes.	10	1,400 00	.....	1,400 00
Centre street, rear of 1932, lot of land used for storage purposes, hired for \$180 per year.				

DORCHESTER.	Hancock street, opposite Bowdoin street, lot of land known as the almshouse lot, containing 104,132 square feet, which belonged to the town of Dorchester at the time of annexation. Upon this land are two stables, office, shed and tool house.	18	19,000 00	8,000 00	27,000 00
	Downer avenue, lot of land containing 35,300 square feet, was purchased in 1871 to protect the almshouse lot. (Seven lots.)	8c. and 10c.	3,300 00	.....	3,300 00
	Codman street, ledge lot containing 299,000 square feet, was purchased in 1870. Upon this lot is a shed containing steam engine and stone crusher, also a stable and tool house; 111,423 square feet additional bought by the city in 1907.	05	20,600 00	3,000 00	23,600 00
ROXBURY.	Highland street, lot of land containing 195,129 square feet, owned by the city. Upon this lot is a large brick stable erected in 1873-74 and used by the Sanitary, Street Cleaning and Paving Services; also a brick building used as a blacksmith shop and a shed for storage purposes. (See Sanitary Service.)	40	78,100 00	51,000 00	129,100 00
	Albany street, No. 636, opposite Sharon street, wharf lot, containing 63,200 square feet, owned by the city. Upon this lot are stables, office, blacksmith and carpenter shops.	1 25	79,000 00	3,800 00	82,800 00
SOUTH END.	Wharf lot adjoining the above, containing 65,535 square feet owned by the city and used for storage purposes and receiving station for Sanitary Service. These wharves are owned by the city.	90	57,900 00	7,300 00	65,100 00
	Massachusetts avenue, near Magazine street, lot of land containing 1,452,628 square feet, rented from New York, New Haven & Hartford Railroad Company and used for storage purposes.*	80	1,162,100 00	26,400 00	1,188,500 00
NORTH END.	Commercial street, No. 521, wharf lot, containing 23,667 square feet, owned by the city. Upon this lot is a stable, shed and office building. Buildings destroyed January 15, 1919, by tank accident.	2 35	55,300 00	15,700 00	71,000 00
	Hyde Park avenue, lot containing 16,541 square feet, owned by the city, used in part by police station. On this lot is an office, stable and shed.†	1 00	9,900 00	11,500 00	21,400 00
HYDE PARK.					

* These estates are only partly occupied by City of Boston.

† These estates are only partly occupied by the Paving Service.

Real Property in Charge of the Highway Division.— (Sanitary Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
H and Second streets, stable and sheds, containing 8,580 square feet. Leased from E. M. & M. J. Mahoney.	30c. and 40c., land 8,580 feet.....	\$2,900 00	\$2,500 00	\$5,400 00
DORCHESTER.				
Victory road (formerly South street), near Fresno street, lot of land taken in 1912 for refuse transfer station. Completed January 4, 1913.	37,990 feet valued as part of 78,458 feet at \$0.08.	About \$7,600 00	67,000 00	74,600 00
ROXBURY.				
Massachusetts avenue and Southampton street, weighing shed, containing about 2,300 square feet of land, leased from the Boston Consolidated Gas Company at \$10 per month.				
Ward street, northerly side, near New York, New Haven & Hartford Railroad, containing 12,500 square feet. (See letter of Street Commissioners, January 6, 1914.)	35,553 square feet at \$0.30.....	About \$10,700 00	20,000 00	30,700 00
Highland street, situated in the old almshouse block, containing 81,082 square feet. Upon this lot are stable, sheds, carriage house, oil plant, etc. A part of this stable and lot is used by the Paving Service and Street Cleaning and Oiling Service.*	78,100 00		51,000 00	129,100 00
SOUTH END.				
Albany street, No. 650, containing 90,800 square feet. Upon this lot are stables, buildings, sheds, veterinary hospital, blacksmith, wheelwright, paint and harnessmakers' shops, also a horseshoeing shop used in part by the Street Cleaning and Sewer Service.		114,000 00	29,000 00	143,000 00

Albany street, No. 636, refuse transfer station, which was completed March 21, 1913.*				
WEST END.				
North Grove street, stables, sheds, etc., containing 45,152 square feet. On May 11, 1896, a horsehoosing shop was established, used in part by the Street Cleaning and Oiling Service.	\$2.25.....	101,600 00	62,500 00	164,100 00
NORTH END.				
Fort Hill Wharf, containing 20,750 square feet and used as a dumping station for the city's garbage and refuse. On this wharf a refuse transfer station was erected in 1912.	14,150 feet at \$12; 2,800 feet at \$3; 3,800 feet at \$1.50.	183,900 00	65,000 00	248,900 00
SPECTACLE ISLAND.				
Four parcels of land, containing 266,500 square feet, taken for a refuse destructor site. Upon this site a refuse destruction plant has been erected by the Boston Development and Sanitary Company.	.....	82,500 00	.....	82,500

* See Paving Service.

Real Property in Charge of the Highway Division.— (Street Cleaning and Oiling Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
Yard and stable at 124 Old Harbor street, corner of Columbia road, leased by the city from D. W. Creed at \$75 per month.				
EAST BOSTON.				
Part of stable on East Eagle street. (See Paving Service.)				
CHARLESTOWN.				
Part of stable at 263 Rutherford avenue; office building, Rutherford avenue; stable at 245-249 Rutherford avenue, now occupied under lease for \$600 per year by Timothy F. Callahan.	\$0 60	\$22,100 00	\$8,300 00	\$30,400 00
ROXBURY.				
Stable on Highland street. (See Sanitary Service.)				
SOUTH END.				
Part of stable at 650 Albany street. (See Sanitary Service.)				
BACK BAY.				
Land at 62 Piedmont street, rented by city from Laurence Minot at \$15 per month; booth loaned by Election Commissioners used as an office on above land.	3 00			
Brick building, 47 Winchester street, leased for \$600 per year from Eleanor W. Daggett.	2 62½			
WEST END.				
Part of stable on North Grove street. (See Sanitary Service.)				
DORCHESTER.				
Gibson street, land and buildings containing stable and sheds, used by Sanitary and Sewer Service; contains 21,250 square feet. (See Water Service.)	.....	7,400 00	5,000 00	12,400 00

Real Property in Charge of the Highway Division.—(Sewer Service.)

LOCATION.	Estimated Value of Land.	Estimated Value of Buildings.	Total Value.
SOUTH BOSTON.			
Summer street, underground pumping station.			
EAST BOSTON.			
East Eagle street, yard and buildings leased from Renton Whidden. (See Paving Service.)			
BRIGHTON.			
Yard, Western avenue. (See Water Service.)			
WEST ROXBURY.			
Child and South streets, yard and buildings occupied in common with Paving Service. (See Paving Service.)	\$19,300 00	\$3,500 00	\$22,800 00
DORCHESTER.			
Gibson street, land. (See Street Cleaning Service.) Old Harbor Point, land and buildings, including pumping station, 22½ acres; 45,729 square feet, more or less, on the westerly side of Mt. Vernon street, exchanged with the Boston Consolidated Gas Company for 51,000 square feet, more or less, on the easterly side of Mt. Vernon street.	196,000 00	617,500 00	813,500 00
SOUTH END.			
Albany street, No. 678, yard and buildings, 42,000 square feet. (See Lighting Service.)	56,400 00	3,000 00	59,400 00
Massachusetts avenue, near Albany street, land and buildings, 7,385 square feet. Sold in 1918 for \$9,800	5,200 00	500 00	5,700 00
Union Park street, corner Albany street, pumping station, containing 4,167 square feet of land	6,300 00	70,000 00	76,300 00
HYDE PARK.			
Milton avenue, pumping station.			
BACK BAY FENS.			
Gatehouse		12,000 00	12,000 00
MOON ISLAND AND SQUANTUM.			
Land, buildings and reservoirs. Upland in Squantum 19.5 acres; upland on Moon Island, 37.65 acres; flats about Moon Island and Squantum, 131 acres.			

Real Property in Charge of the Highway Division.—(Street Cleaning and Oiling Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
SOUTH BOSTON.				
Yard and stable at 124 Old Harbor street, corner of Columbia road, leased by the city from D. W. Creed at \$75 per month.				
EAST BOSTON.				
Part of stable on East Eagle street. (See Paving Service.)				
CHARLESTOWN.				
Part of stable at 263 Rutherford avenue; office building, Rutherford avenue; stable at 245-249 Rutherford avenue, now occupied under lease for \$600 per year by Timothy F. Callahan.	\$0 60	\$22,100 00	\$8,300 00	\$30,400 00
ROXBURY.				
Stable on Highland street. (See Sanitary Service.)				
SOUTH END.				
Part of stable at 650 Albany street. (See Sanitary Service.)				
BACK BAY.				
Land at 62 Piedmont street, rented by city from Laurence Minot at \$15 per month; booth loaned by Election Commissioners used as an office on above land.	3 00			
Brick building, 47 Winchester street, leased for \$600 per year from Eleanor W. Daggett.	2 62½			
WEST END.				
Part of stable on North Grove street. (See Sanitary Service.)				
DORCHESTER.				
Gibson street, land and buildings containing stable and sheds, used by Sanitary and Sewer Service; contains 21,250 square feet. (See Water Service.)	.....	7,400 00	5,000 00	12,400 00

Real Property in Charge of the Highway Division.— (Sewer Service.)

LOCATION.	Estimated Value of Land.	Estimated Value of Buildings.	Total Value.
SOUTH BOSTON.			
Summer street, underground pumping station.			
EAST BOSTON.			
East Eagle street, yard and buildings leased from Renton Whidden. (See Paving Service.)			
BRIGHTON.			
Yard, Western avenue. (See Water Service.)			
WEST ROXBURY.			
Child and South streets, yard and buildings occupied in common with Paving Service. (See Paving Service.)	\$19,300 00	\$3,500 00	\$22,800 00
DORCHESTER.			
Gibson street, land. (See Street Cleaning Service.)			
Old Harbor Point, land and buildings, including pumping station, 22½ acres; 45,729 square feet, more or less, on the westerly side of Mt. Vernon street, exchanged with the Boston Consolidated Gas Company for 51,000 square feet, more or less, on the easterly side of Mt. Vernon street.	196,000 00	617,500 00	813,500 00
SOUTH END.			
Albany street, No. 678, yard and buildings, 42,000 square feet. (See Lighting Service.)	56,400 00	3,000 00	59,400 00
Massachusetts avenue, near Albany street, land and buildings, 7,385 square feet. Sold in 1918 for \$9,800.	5,200 00	500 00	5,700 00
Union Park street, corner Albany street, pumping station, containing 4,167 square feet of land.	6,300 00	70,000 00	76,300 00
HYDE PARK.			
Milton avenue, pumping station.			
BACK BAY FENS.			
Gatehouse.		12,000 00	12,000 00
MOON ISLAND AND SQUANTUM.			
Land, buildings and reservoirs. Upland in Squantum 19.5 acres; upland on Moon Island, 37.65 acres; flats about Moon Island and Squantum, 131 acres.			

Real Property in Charge of the Highway Division.—(Water Service.)

LOCATION.	ESTIMATED VALUE OF LAND.		Estimated Value of Buildings.	Total Value.
	Per Foot.	Total.		
EAST BOSTON.				
Eagle Hill reservoir, with a capacity of 5,600,000 gallons. Area of property, 220,875 square feet, Con for street, formerly East Boston pumping station, now used as district headquarters and containing 40,000 square feet filled and 78,000 square feet flats. Includes strip of filled land and flats containing 42,000 square feet taken by Metropolitan Water Board, March 26, 1900. Sold in 1918 for \$22,500. (See Paving Service.)	\$0 30 25,000 at \$0.60 93,000 at \$0.15	\$66,300 00 15,000 00 13,900 00	\$400 00 8,000 00	\$66,700 00 36,900 00
High service tank, Orient Heights, capacity 122,000 gallons. Area of property, 11,394 square feet.	\$0 10	1,100 00	5,000 00	6,100 00
CHARLESTOWN.				
Medford street, corner Tufts street, containing 13,050 square feet. Upon this lot are a work-shop and stable.	50	6,500 00	4,000 00	10,500 00
BRIGHTON.				
Western avenue, lot of land containing 135,350 square feet.....	.....	9,200 00	5,500 00	14,700 00
WEST ROXBURY.				
Williams street, Jamaica Plain, Nos. 110-112, land and buildings used as district headquarters, rented from Thomas Minton for \$600 per year.	14	1,800 00	8,000 00	9,800 00
Washington street and Metropolitan avenue, lot of land. Area of property, 12,895 square feet.				
DORCHESTER.				
Gibson street, in rear of lot occupied by Street Cleaning Service, land and buildings, 3,840 square feet.	.....	1,000 00	1,500 00	2,500 00

ROXBURY.				
Henth and Lawn streets, strip of land containing 5,707 square feet (pipe route).....	25	1,425 00	.....	1,425 00
SOUTH END.				
Albany street, No. 710, containing 98,100 square feet. Upon this lot are a machine shop, stable, wharf and pipe yard. (See Lighting Service.).....	.....	91,000 00	117,000 00	208,000 00
HYDE PARK.				
Fairmount reservoir, with a capacity of 1,500,000 gallons.....	04½	9,801 00	.....	.....
Fairmount standpipe, with a capacity of 500,000 gallons. Area of property, 5 acres.....				
Water street, pumping station and lot of land. Area of property, 934,951 square feet. Portion of this lot sold in 1918 for \$1,700.	05	45,000 00	5,000 00	50,000 00
Winthrop street, No. 48. Upon this lot are a building, two sheds and a stable. Leased from Henry S. Bunton, trustee for Robert Bleakie, for \$100 per year.	.....	.....	.....	700 00
Sprague street, bordering Sprague pond, lot of land containing 16,128 square feet.....	.....	500 00	.....	500 00
BROOKLINE.				
Pipe route, from Beacon street to Boylston street. Area of property, 163,000 square feet. (Acquired by Metropolitan Water and Sewerage Board in 1915.)	15	2,500 00	.....	2,500 00
WINTHROP.				
Strip of land at Point Shirley containing 7,725 square feet.....	01	77 25	.....	77 25
DENHAM.				
Paradise lane, containing 12.5 acres. Upon this lot is a pumping station.....	.....	7,000 00	2,000 00	9,000 00

* 208,020 square feet in Boston, balance in Milton.

EMPLOYEES.

The following tables show the number of requisitions made on the Civil Service Commission for men; the number appointed, reinstated, died, resigned, discharged and retired; also the grade and number of employees in the department:

Requisitions made on the Civil Service Commission	40
Requisitions canceled	7
Number of men called	222
Number of men certified	401
Number of men appointed	171
Provisional appointments made permanent	4
Promotions allowed	6
Reinstatements allowed	*48
Number of men discharged	94
Number of men resigned	101
Number of men died	109
Number of Civil War veterans retired	5
Number of laborers retired	34
Number of transfers to other departments	14
Number of transfers from other departments	9
Number of Civil War retired veterans died	8
Number of retired laborers died	35

The records of the department show that there are now 3,090 persons eligible for employment in the several divisions and of that number 2,914 were upon the January, 1919, pay rolls.

* Forty-three of these men were on the eligible list February 1, 1918.

Grade and Number of Employees.

TITLE.	SERVICES.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.
Commissioner.....	1									1
Division engineers.....		1	1				1		1	4
Engineers in charge.....			1						2	3
Chief clerk.....	1									1
Clerks.....	42	15	6	2		1	2	1	38	107
Messengers.....									2	2
Chief engineers (civil).....		1	1							2
Assistant engineers (civil).....		17	17				8		6	48
Draughtsmen.....		8	8				6		5	27
Instrumentmen.....		12	25				6		5	48
Rodmen.....		12	25				9		5	51
Inspectors.....		52	39	44	36		4		40	215
Foremen.....		11	4	8	10				13	46
Subforemen.....		29	4		3		3		1	40
Investigator.....			1							1
Addressograph printers.....									2	2
Blacksmiths and assistants.....		8	1	18					3	30
Boilermaker.....						1				1
Bracers and assistants.....			4							4
Blueprinters.....			2				1			3
Boys.....	2	1								3
Chauffeurs.....	1	4	5	2	3		4	1	11	31
Carpenters and assistants.....		21	4	2		4	14		5	50
Chief inspectors.....		1			1				1	3
Claim agent.....	1									1
Cement testers and assistants.....			2							2
Coal passers.....			8							8
Cashiers.....		1				1				2
Constable and inspector.....		1								1
Drawtenders and assistants.....							140			140
Deckhands.....						27				27
Driver.....		1								1
Engineer (gasolene).....		1								1
<i>Carried forward</i>	48	197	158	76	53	34	198	2	140	906

Grade and Number of Employees.— *Continued.*

TITLE.	SERVICES.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.
<i>Brought forward</i>	48	167	158	76	53	34	198	2	140	906
Engineers (steam).....		11	7			12			1	31
Electricians.....			1			1	1		1	4
Firemen.....		4	11			40			2	57
Chief engineer (steam).....			1							1
Gate-men.....			3			16				19
General foremen.....		1	1		1	1			2	6
Harnessmakers and assistants.....				8						8
Horse-shoers.....				7						7
Inspectors, castings.....									2	2
Janitors (scrub).....				1		3	1		2	7
Janitresses.....						7				7
Joiners.....						3				3
Laborers and helpers.....		319	90		152	8	1		166	736
Lamplighters.....						2		1		3
Machinists and assistants.....			4			1	1		23	29
Meter testers.....									8	8
Meter readers.....									23	23
Masons (stone and brick).....			13						1	14
Medical inspectors.....		1		1						2
Oilers.....			18			7				25
Pipe fitter.....						1				1
Pavers and assistants.....		83							3	86
Plumbers and assistants.....				1					40	41
Painters.....		2	1	11		2	3			19
Captains.....						12				12
Quartermasters.....						12				12
Repairers.....									42	42
Roofer.....						1				1
Rammers.....		18								18
Rigger.....						1				1
Sealers.....									2	2
Sewer flushers.....			4							4
<i>Carried forward</i>	48	636	312	105	206	164	205	3	458	2,137

Grade and Number of Employees.— *Concluded.*

TITLE.	SERVICES.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.
<i>Brought forward.....</i>	48	636	312	105	206	164	205	3	458	2,137
Supervisors.....	1				1		2			4
Stenographers.....	1	2	1					1		5
Stonecutters.....		14	2							16
Superintendents.....			1						2	3
Stockkeepers.....			1	1		1			3	6
Stablemen.....		29	4	30	34		3		14	114
Tankman.....						1				1
Teamsters.....		60	8	358	220		3		18	667
Telephone operator.....									1	1
Tollmen.....						12				12
Toolman.....		1								1
Veterinarian.....				1						1
Chief veterinarian.....		1								1
Watchmen.....		13	21	14	5		4		12	69
Weighers and assistants.....		1		3						4
Wharfinger and assistants.....		1		4						5
Wharfmen.....				3						3
Wheelwrights and assistants.....				8						8
Yardmen.....		9	3	6	7				6	31
Totals.....	50	767	353	533	473	178	217	4	514	3,089

Comparative Table Showing the Number of Employees Actually Employed February 1, 1918, and February 1, 1919.

	Central Office.	Bridge.	Ferry.	Lighting.	Paving.	Sanitary.	Sewer.	Street Cleaning and Watering.	Water.	Total.
February 1, 1918.....	51	226	189	4	761	481	428	456	525	3,121
February 1, 1919.....	45	201	179	4	741	477	322	459	486	2,914

Total Eligible Force.

February 1, 1918.....	53	233	189	4	791	517	447	479	548	3,261
February 1, 1919.....	50	217	178	4	767	533	353	473	514	3,089

Table of Employees Showing Appointments, Transfers, Resignations, Retirements, Deaths, Etc., During the Year.

Died.	Retired Laborers.	Retired Veterans.	Transferred to Other Departments.	Transferred to Other Services.	Resigned.	Discharged.	February 1, 1918.	SERVICES, 1918-19.	January 31, 1919.	Transferred from Other Services.	Transferred from Other Departments.	Reinstated.	Appointed.
.....	.....	.....	.....	3	8	.....	53	Central Office.....	* 50	4	.....	.....	4
4	.....	1	2	15	3	13	233	Bridge.....	217	16	1	.....	5
4	.....	1	.....	10	15	4	189	Ferry.....	178	15	.....	.....	8
.....	.....	.....	.....	.....	.....	.....	4	Lighting.....	4	.....	.....	.....	.....
29	13	3	.....	19	2	25	791	Paving.....	767	57	3	3	4
22	6	.....	3	19	9	.....	517	Sanitary.....	533	17	.....	.....	58
14	2	.....	3	21	35	.....	479	Street Cleaning.....	473	10	1	1	57
17	4	.....	3	54	12	47	447	Sewer.....	353	25	1	1	16
19	9	.....	3	10	17	5	548	Water.....	514	7	3	.....	19
109	34	5	14	151	101	94	3,261	Totals.....	3,089	151	9	5	171

* Includes eight Central Office employees who are paid on Water Service pay roll.

Respectfully submitted,

T. F. SULLIVAN,
Commissioner of Public Works.

EMPI

John J.
William
James J
Joshua
Frank J
John F.
William
John M
James J
Samuel
Christo
William
Edward
Albert J
Joseph J
Daniel J
David C
Charles
Thomas
Lawren
Melvin
Jeremia
Philip J
James J
George
Coleman
James J
John C
William
Leo C
Peter C
William
Thomas
Charles
John H
Benedic
John J.
John J.
Joseph
Philip J
Joseph
James J
James J
Michael
William
John J.
William
Thomas
Matthe
Roswell

Com

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Februa

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Table of Emplo

Died.	Retired Laborers.	Retired Veterans.
.....
4	1
4	1
.....
29	13	3
22	0
14	2
17	4	.....
19	9	.....
109	34	5

*

PART II.

APPENDICES.

APPENDIX A.

CENTRAL OFFICE.

Appropriation	\$79,125 05
Expenditures from February 1, 1918, to January 31, 1919	73,074 04
Unexpended balance transferred to city treasury	<u>\$6,051 01</u>

Expenditures.

Salary, commissioner	\$9,000 00
Salaries of clerks, stenographers, supervisor of contracts, etc.	56,190 42
Automobile expense:	
Wages of chauffeurs	\$1,092 00
New Hudson touring car	1,975 00
Gasolene	376 44
Storage	228 50
Repairs	244 76
Tires and tubes, new and repairs,	529 39
Supplies	107 86
Batteries	53 78
Robes	37 76
Oil, grease, etc.	25 80
Registration	20 00
	<u>4,691 29</u>
Printing	1,668 50
Stationery	774 97
Books, papers, magazines, etc.	159 21
Postage	252 69
Telephone tolls and rentals	50 52
Travel expense, car fares, etc.	180 36
Inspection and repairs to typewriters and adding machine	91 05
Premium on surety bond	6 00
Justice of the peace papers	7 00
Soap	2 03
	<u>\$73,074 04</u>

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

BOSTON, February 1, 1919.

MR. THOMAS F. SULLIVAN,
Commissioner of Public Works:

DEAR SIR,— I respectfully submit the following report of the income, expenditures and operation of the Bridge and Ferry Division for the year ending January 31, 1919. The expenditures of the division in the regular maintenance appropriations of the department were \$741,327.60. In addition to the regular maintenance work the division supervised the expenditure of \$194,192.60 under a number of special appropriations, making the total expenditures for the year credited to the Bridge and Ferry Division, \$935,520.20.

BRIDGE SERVICE.

Construction work has been delayed by the difficulty of obtaining materials and labor owing to war conditions and much of the work under contract could not be started or if started could not be finished in the year 1918-19. Descriptions of the more important construction jobs are given in the accompanying statement.

Belgrade Avenue Bridge (formerly Beech Street Bridge) (over New York, New Haven & Hartford Railroad).— A contract for rebuilding this bridge, under an order of the Public Service Commission, was awarded to the West Roxbury Trap Rock Company, but owing to war conditions work could not be started. The work will be done during the coming year.

Broadway Bridge (over the Boston & Albany Railroad).— On February 5, 1918, after inspection of this bridge by the engineers of the Public Service Commission, Boston & Albany Railroad, Boston Elevated Railway Company and the City of Boston, it was decided and

ordered by the Public Service Commission to shut off all travel over this bridge on account of the unsafe condition of the floor system. Plans and specifications were prepared and on May 9, 1918, a contract was awarded to the Boston Bridge Works for the rebuilding of the floor system, deck, railings, etc. Owing to the inability of the contractor to procure material for the work, the field construction has not yet commenced.

Franklin Street Subway (under the Boston & Albany Railroad).—The City of Boston paid \$3,863.10, including interest, toward the cost of the Franklin Street Subway, under a decree of the Supreme Court. The decree provides that the City of Boston shall maintain the structure.

Harrison Avenue Bridge (over the Boston & Albany Railroad).—The City of Boston paid \$2,389.33, including interest, toward the cost of the Harrison Avenue Bridge, under a decree of the Supreme Court, which also provided that the city shall maintain the wearing surface of the bridge, except for such obligations as fall on the West End Street Railway Company.

Norfolk Street Bridge (over the Midland Division, New York, New Haven & Hartford Railroad).—The Public Service Commission has ordered the bridge widened and moved to correspond with the widening of Norfolk street and a contract was awarded to Daddario & Booth for the necessary alterations of the pedestal stones and for constructing a retaining wall on Norfolk street. Owing to war conditions work could not be started but will be done in the spring.

Northern Avenue Bridge (over Fort Point Channel).—A contract for repairs to span 1 was awarded to the Boston Structural Steel Company, but owing to the difficulty in obtaining the necessary material work will not be started until the coming year.

Winthrop Bridge.—Final settlement of the cost of Winthrop Bridge with the town of Winthrop has not yet been made as an outstanding claim has just been settled but the cost will probably be adjusted in the near future.

Apportionment of Cost of Bridges between Boston and Chelsea.—The Supreme Court of the United States decided in favor of the City of Boston on the appeal by the city of Chelsea on the decree of the Supreme Court of Massachusetts, but payments have not all been made as in order to obtain the necessary money the city of

Chelsea has had to apply to the Legislature. The decree of the Supreme Judicial Court of Massachusetts is as follows:

This case came on to be heard at this sitting after rescript, and after a decree as to respondents, the West End Street Railway Company, the Boston Elevated Railway Company, lessee, and the Bay State Street Railway Company, entered on the twenty-ninth day of June, 1915, and it appearing that the West End Street Railway Company has complied with said decree by the payment to the petitioner of the extra cost required to adapt to each other the railway of said West End Street Railway Company and the Meridian Street Bridge, which is 7.6 per cent of \$175,000, the total cost thereof, to wit, the sum of \$13,300; and that the Bay State Street Railway Company has complied with said decree by the payment to the petitioner of the extra cost required to adapt to each other the railway of said Bay State Street Railway Company and Chelsea Bridge North, so-called, which is 6.7 per cent of \$425,000, the total cost thereof, to wit, the sum of \$28,475, and the extra cost required to adapt to each other said railway and the temporary bridge of Chelsea Bridge South, so-called, which is 15.2 per cent of \$75,000, the total cost thereof, to wit, the sum of \$11,400, making the total amount paid by said Bay State Street Railway Company \$39,875; said decree further providing that when the work on the permanent Chelsea Bridge South, so-called, shall be completed, the Bay State Street Railway Company shall pay to the petitioner the extra cost required to adapt to each other the railway of said Bay State Street Railway Company and said Chelsea Bridge South, so-called, which is 5.75 per cent of \$403,015, the estimated cost thereof, to wit, the sum of \$23,173.36; and that the difference between the sums so paid by said West End Street Railway Company and said Bay State Street Railway Company, respectively, and the amounts which said Street Railway Companies would have been required to pay according to the report of the Commissioners heretofore filed in this cause should be assumed and borne by the City of Boston; it is ordered, adjudged and decreed:

1. That the City of Chelsea forthwith pay to the City of Boston 17.5 per cent of \$425,000, the total cost of the work upon Chelsea Bridge North, so-called, to wit, the sum of \$74,375.

2. That the City of Revere forthwith pay to the City of Boston 5 per cent of \$425,000, the total cost of the work upon Chelsea Bridge North, so-called, to wit, the sum of \$21,250.

3. That the City of Chelsea forthwith pay to the City of Boston 17.5 per cent of two-thirds of the cost of the temporary bridge of Chelsea Bridge South, so-called, namely, 17.5 per cent of \$50,000, to wit, the sum of \$8,750.

4. That the City of Revere forthwith pay to the City of

Boston 5 per cent of two-thirds of the cost of the temporary bridge of Chelsea Bridge South, so-called, namely, 5 per cent of \$50,000, to wit, the sum of \$2,500.

5. That the cost of maintenance of said Chelsea Bridge shall be apportioned as follows: 60 per cent upon the City of Boston, 5 per cent upon the City of Revere, and 35 per cent upon the City of Chelsea. Excepting, however, the maintenance of the draw of the Chelsea Bridge South.

6. That the City of Chelsea forthwith pay to the City of Boston 20 per cent of \$175,000, the total cost of the Meridian Street Bridge, to wit, the sum of \$35,000.

7. That the cost of maintenance of Meridian Street Bridge between East Boston and Chelsea shall be apportioned as follows:— 65 per cent upon the City of Boston, and 35 per cent upon the City of Chelsea.

8. That the difference between the cost of all of said work and the amounts thereof required to be paid by said respondents for said work shall be assumed and borne by the City of Boston.

9. That the report of the Commissioners, as modified by this decree, is hereby affirmed.

By the Court,

JOHN F. CRONIN,
Clerk.

August 6, 1915.

A true copy,

Attest: JOHN F. CRONIN, *Clerk.*

December 21, 1918.

(Seal.)

FERRY SERVICE.

A contract for installing a new boiler on the ferryboat "Hugh O'Brien" was awarded to the Hodge Boiler Works, but as yet, owing to failure in delivering the steel, no work has been done.

A statement of the more important construction work is given in the accompanying pages.

RECOMMENDATIONS FOR 1919.

Bridge Service.

Ashland Street Bridge (over the New York, New Haven & Hartford Railroad).— This bridge, which was built in 1875, and which is in poor condition, should be rebuilt.

Clarendon Street Bridge — proposed — (over the New York, New Haven & Hartford Railroad and the Boston & Albany Railroad).— This bridge should be started during the coming year under the lay-out of the Street Commissioners.

Warren Bridge.— This bridge should have the wooden flooring and stringers entirely renewed.

Ferry Service.

Plans should be made for a new boat. Engine repairs on the "Hugh O'Brien" should be made at the same time that the new boiler is being installed.

It would be advisable to alter the superstructure of the "John H. Sullivan" to allow more room for teams, for if one or two of the older boats are condemned before a new boat is obtained, the service furnished for the transportation of vehicles would be poor.

REPORT ON THE STRANDWAY IMPROVEMENT.

The project of the Strandway and Old Harbor improvement in South Boston was turned over to this department in August, 1916, for construction.

The work contemplated included:

First.— The placing of material dredged from Old Harbor on the flat sand for shores of the bay, including the retaining of this material by means of dikes or other means and the placing of $2\frac{1}{2}$ to 3 feet of suitable beach sand as a surface on the beach.

Second.— The construction of a wooden bulkhead about 1,600 feet long on the southeast boundary of the Strandway.

Third.— The furnishing and placing of loam on the playground and borders of the Strandway.

Fourth.— The construction of roadways and sidewalks.

Fifth.— The extension of the sewerage outlets at H, Vale and Kemp streets and Crescent avenue, including the construction of two gate chambers at Vale and Kemp streets, and a weir chamber at H street, also the construction of surface drains and catch-basins.

Sixth.— The placing of stone ballast, the construction of fences, etc.

Seventh.— The excavation of a channel from the dredged basin out to deep water.

On December 8, 1916, a contract was let to the New York State Dredging Corporation for this work and since then the work has proceeded with intermittent delays, due to adverse weather conditions, and the work was completed December 9, 1919.

Some filling, the roadway and sidewalk construction and part of the loam surfacing has not been done since it was found, after a thorough survey, that insufficient

funds had been appropriated for the completion of all the work contemplated. The work was divided into two main parts and paid for from two separate appropriations — sewerage works and the Strandway appropriation.

Under the sewerage works appropriations the following work has been done:

Between H and I streets on Marine road a 2 by 3 foot concrete connection between the I street sewer and the I street overflow was installed.

At H street and Marine road a concrete weir chamber with a suitable manhole was built. Connecting with this and extending 450 feet out into the bay a single line of 60-inch cast-iron pipe was laid on a pile platform.

At Vale street a reinforced concrete conduit 6 feet 6 inches by 6 feet 6 inches inside measurement was constructed, 245 feet long. At the end of this conduit a gate chamber of reinforced concrete was built in which two gates with their operating machinery were installed. From this gate chamber a double line of 60-inch cast-iron pipe was laid on a pile platform. This extended 547 feet out into Old Harbor.

The Kemp street overflow was extended 1,328 feet with a 10-foot $3\frac{1}{8}$ -inch by 6-foot 3-inch reinforced concrete conduit to a gate chamber in which three gates with operating machinery and appurtenances were installed. Three lines of 60-inch cast-iron pipe were extended 506 feet out to deep water from this gate chamber, placed on a pile platform.

The Crescent avenue overflow was extended from a point in Old Colony avenue, near the Columbia Road Bridge, 621 feet southerly to the new wooden bulkhead. A reinforced concrete conduit 8 feet by 8 feet, inside diameter, built partly on piles and partly on good gravel foundation, was used for this extension. A contract was made for the installation of the gates and other operating machinery in the gate chambers, with the Gibby Foundry Company of East Boston. The cost of this installation was \$3,600.

All of these overflow extensions were built by the usual methods of sewer construction and with the usual appurtenances, manholes, inlets and the like. The construction of these overflows in this matter has removed the unsanitary conditions which existed in Old Harbor prior to their installation.

Under the Strandway appropriation the following work was done:

A channel about 100 feet wide at the bottom and varying from 7 to 10 feet deep at low water was dredged from a point opposite I street to a point opposite the South Boston Yacht Club. A basin about forty acres in area and from 7 to 16 feet deep was dredged in the westerly end of Old Harbor. The material dredged was silt, peat, clay and sand. The clay was used to form a dike and to build up the high fill necessary to connect the Strandway with Columbia Road Bridge. The outside slope of the dike formed the desired slope for the beach, upon which sand was spread. The softer material was pumped behind the dike.

The southeast boundary of this fill was held in place by a substantial wooden bulkhead extending from the Columbia Road Bridge easterly 1,522 feet, at the end of which 5,237 tons of stone ballast was placed to prevent the fill from sliding around the end of the bulkhead onto private land.

About fifty-six acres of land have been reclaimed in this way and the obnoxious South Boston flats almost entirely removed.

Suitable drains, catch-basins and manholes were built where possible for the drainage of this area. Over part of the area it was not possible to install the drains because of the soft character of the fill. When this soft fill has dried out and hardened the drains may be installed.

The area, except the very soft part, has been sub-graded and about ten acres loamed.

In addition to the dredging, filling and sewerage works a granolithic sidewalk was built 18 feet wide on the Strandway, from a point opposite the Mosquito Fleet Yacht Club to the headhouse at City Point. Driveways were placed where necessary and edgestone and gutter paving regulated. The roadway between L and M streets was raised and repaved to accommodate the new sidewalk grades. This work was done under contract with James L. Pierce and work was completed November 21, 1918. The total amount to be paid to the contractor is \$20,761.96.

It was originally intended to build a bath house of concrete and steel on the Strandway and a contract was entered into with Harrison H. Atwood, architect, for plans and specifications for the bath house. On account of lack of sufficient money to build a suitable bath house at this location this work was not done.

BRIDGE SERVICE CONSTRUCTION WORK, 1918-19.

Allston Bridge (over the Boston & Albany Railroad).

During the year the easterly roadway of this bridge has been extensively repaired. Many of the floor beams which had deteriorated badly from the effects of locomotive gases were strengthened by adding new plates and angles, the floor system was cleaned and painted and a new wooden floor was built. The work was done by day labor forces.

Broadway Bridge (over New York, New Haven & Hartford Railroad).

Owing to the rapid deterioration of the steelwork of this bridge, over the main line tracks of the railroad, it became necessary to renew most of the steel stringers and to strengthen many of the floor beams of two spans. In order to do this the paving, waterproofing and underplank had to be removed. Only one roadway has been opened up at a time so that travel has been maintained at all times. The steelwork for this job is being done by the Transit Department and the removal and replacing of the paving, waterproofing and wooden floor, including all incidental work, has been let under contract to Michael J. Kelliher. Only one half of this work has been completed to date.

Brookline Avenue Bridge (over Boston & Albany Railroad).

Although a contract was made with Michael Meehan, approved May 7, 1917, for rebuilding Brookline Avenue Bridge, no work was done at the site of the bridge until the middle of May, 1918, and at the date of this report the new steelwork is in condition to receive the concrete for the roadway, which will be placed as soon as the weather will permit. The serious delay in commencing this work was due primarily to the difficulty in obtaining structural steel and to the congestion in rail transportation, both brought about by war conditions.

It is anticipated that roadway travel will be resumed over this bridge by the middle of February and all work completed by June 1, 1919.

Chelsea Bridge North.

In 1912-13, when the draw span and approaches of this bridge were rebuilt, about 325 feet in length of the southerly approach from the Mystic Wharf end was not included in the work.

The planking of the roadway and many of the stringers had become so badly decayed that in the spring of 1918 it was considered necessary to strengthen the floor for the heavy loads passing over the bridge and the Bay State Street Railway Company had been notified by the Public Service Commission that the stringers under its rails should be strengthened for the heavy cars in use on the bridge.

On May 21, 1918, a contract was made with the John P. Cavanagh Company for rebuilding the floor above the capping of the timber trestles on this portion of the bridge and the work was completed December 20, 1918, at a cost to the city of \$34,879.21.

While the work was in progress under this contract the Bay State Street Railway Company put in, at its own expense, four lines of stringers and bolsters under its tracks.

As rebuilt, there are fifteen lines of roadway stringers, including the four put in by the street railway company, as against eight lines under the old roadway. The construction above the stringers is the same as in the other portion of the bridge; 6-inch yellow pine planking covered with four thicknesses of roofing felt, laid and mopped in the usual manner. The granite paving blocks of the old bridge were relaid with pitch and pebble joints. The sidewalk was entirely rebuilt and new wooden fences were built on both sides of the bridge. Some spur shores were refitted and the decayed portion of the outside posts of the trestles were renewed with sound timber. The whole of this work was carried on so that at all times the traffic over the bridge, including both lines of street cars, was maintained.

On February 4, 1918, the span of this bridge became disabled by reason of breaking of the submarine feed cables. On examination it was found that the center casting, which holds the draw in true position, had

sheared its anchor bolts and was moving with the draw. Considerable difficulty was experienced in getting it into exact position again. To do the work the bridge had to be closed to all street travel for a period of nine days. On February 13, 1918, the drawbridge was put in commission again, having been accurately realigned and firmly secured.

Congress Street Bridge.

A contract was made with V. Grande, approved by the Mayor April 29, 1918, for rebuilding the roadway flooring of the draw span of this bridge.

The underflooring and sheathing were entirely renewed with new spruce plank, 4-inch being used for the underflooring and 2-inch for the sheathing, and such stringers as were in poor condition were replaced with new, yellow pine stringers, steel shims being used where necessary to bring old stringers to the proper grades. The old curbs were replaced with new, yellow pine timber where necessary and the whole roadway put in good condition.

This work was completed May 16, 1918, at a cost of \$4,490.81.

Dorchester Avenue Bridge (over Fort Point Channel).

The southerly face of the channelway at the draw has been repaired during the year at a cost of \$924.03.

Northern Avenue Bridge.

On March 19, 1918, the Board of Street Commissioners granted permission to the Union Freight Railroad Company to extend its tracks across Northern Avenue Bridge. A centering device and rail locks have been installed on the draw of this bridge by the railroad company, under their grant for operating trains across this bridge. In addition, the city has done considerable work readjusting the trusses and resetting the landing blocks.

A contract for strengthening the draw span of this bridge for electric freight cars, which was let January 8, 1918, to the Boston Structural Steel Company, for \$1,684, was completed in March. The work consisted of strengthening floor beams, putting in new ties, struts, etc., for the additional load imposed on it by the 46-ton electric freight cars.

A contract was made with the same company, dated February 6, 1918, for similar work on the steel fixed spans of this bridge and on the bridge over A street, for the sum of \$1,460. Work was completed April 3, 1918.

Summer Street Bridge (over Fort Point Channel).

The stringers under the street car tracks in the triangular area adjoining the rear end of the draws have been reinforced so that now this portion of the bridge is of equal strength to that of other portions. The cost of the work done this year was \$763.75.

The street railway company is now operating electric freight cars across both of these bridges.

Summer Street Bridge (over Reserved Channel).

The northerly face of the channelway of the downstream pier, near the draw, has been repaired at a cost of \$1,131.60.

Warren Bridge.

The channel face and the landing for the downstream draw have been repaired during the year at a cost of \$1,292.62.

During the past year \$419.20 has been expended for strengthening the flooring on account of its rotten condition, and about a year ago over \$600 was expended for the same purpose.

Malden Bridge.

Under chapter 777 of the Acts of the Legislature of 1913, which provided for the Everett extension, so called, of the Boston Elevated Railway Company, the City of Boston was required to construct a new draw in Malden Bridge to permit the use for purposes of navigation of the new channel relocated by the act nearer the middle of Malden river, and the Directors of the Port of Boston and the Board of Railroad Commissioners, acting jointly, were authorized and directed to approve the plans for the new structures, after a public hearing.

The act provided further that the Directors of the Port should determine the cost to the City of Boston of the construction of the new draw in Malden Bridge, and that the cost should be paid by the railway com-

pany to the city, which payment should be deemed a part of the cost of the construction of the bridge to be built by that company.

After a public hearing the Directors of the Port and the Public Service Commission (the successors to the Railroad Commissioners), under date of May 25, 1914, approved the plans which had been prepared by the engineering departments of the railway company and of this division.

Bids for building the masonry piers and foundations for the bridge of the Elevated Railway Company and for the reconstruction of Malden Bridge were received by that company in January, 1916, the Hugh Nawn Contracting Company being the lowest bidder for the whole work. Before the contract was executed it was deemed best for legal reasons to make a separate contract for the reconstruction of Malden Bridge, running to the City of Boston, and with the approval of the Mayor such a contract was made with the Hugh Nawn Contracting Company, dated March 30, 1916.

A second contract was made with the McClintic-Marshall Company of Pittsburgh, Penn., for furnishing and erecting the draw and approach span of the highway bridge, dated May 3, 1916, and approved by the Mayor May 20, 1916. This work was subsequently sublet to the Boston Bridge Works, Inc.

In order to prevent confusion arrangements were made by which the engineer for the Boston Elevated Railway Company, Mr. Clarence T. Fernald, was authorized to act for the City of Boston as engineer in charge of the work. At all times, however, during its progress an inspector from this division was on the work.

Under these contracts work was begun April 3, 1916, but because of weather conditions and other causes its completion was somewhat delayed. The work on the draw span was completed September 25, 1917, and the whole bridge accepted by the Commissioner of Public Works May 2, 1918.

The amount paid under the contract with the Hugh Nawn Contracting Company was \$149,374.47, and under the contract with the McClintic-Marshall Company the sum of \$71,186.98 was paid.

The following description of the work is taken substantially from two papers read before the Boston Society of Civil Engineers, prepared by Mr. Fernald and Mr. John C. Moses, engineer of construction of the

Boston Bridge Works, and printed in the October, 1918, journal of that society. These papers cover the entire construction of both the highway bridge and that for the Elevated Railway, but as the work was so closely connected it has been deemed best not to separate the descriptions.

The plan, as finally approved by the several boards, provided for a bridge or elevated structure crossing the Mystic river, from a point on the south shore about 80 feet west of the highway bridge, and joining the north end of the Beacham street car yard to a point near the pumping station of the metropolitan sewerage system; a distance of about 844 feet. From this point the elevated structure continues for about 2,341 feet, where it reaches the ground and the tracks extending on the surface to the proposed temporary station, a total distance of one mile north of the present Sullivan Square Terminal.

The alignment of the highway bridge was moved westerly about one half its width to a line parallel to and about 18 feet away from the elevated structure. North of the pile bridge the approach included the construction of a heavy sea wall 300 feet long, averaging 16 feet high and a 3-foot by 5-foot fill extending 600 feet further north.

In each bridge there was located a Strauss bascule drawbridge, providing for a width of 75 feet clear opening, and a depth of 30 feet of water.

The railway drawbridge was built at a high level, having 26 feet to 28 feet headroom under it at high water, the counterweights being underhung.

The highway drawbridge had a moving leaf 60 feet wide and 105 feet long and is of the heel trunnion type, the counterweight being supported over the roadway on upright columns, hinged at the rear or heel end of the moving leaf. The depth of water at the draw opening was fixed by the War Department at 30 feet and here the dredging for the channel foundations on either side was carried down to about 32 feet below low water and the piles for the landing pier were cut off at minus 30.5 and for the trunnion pier they were not cut but left at about grade minus 29, the plane of reference being Boston City Base.

The piles for all the other piers, excepting the two abutments of the elevated bridge, were cut at grade minus 20 and for the abutments at grade minus 15.

In all cases the concrete for the piers of 1-2-4 mixture was carried from the piles to grade minus 1. Above this point the work was of quarry-faced granite, backed with 1-2½-5 concrete; the coping stone was finished with four-cut work on top having quarry-faced edges with 2-inch draft line at top and bottom, the finished work being at grade 17.

The four large piers at the draw were of special design to meet the conditions imposed by the necessary depth, distribution of load and methods of construction. The maximum load calculated for the piles was about fourteen tons, assumed to occur when the bridges were open and subjected to a wind force of fifteen miles per hour. The minimum spacing for piles was 2.5 feet on centers at points of heaviest loading.

The conditions controlling the construction of these bridges and imposed by the necessity of keeping traffic moving over the old bridge as nearly normal as possible during its reconstruction made the operations interesting at all times and difficult at many others. This traffic was to be maintained on one half of the old bridge, while the depth of the channel piers endangered not only its safety by undermining the piles but its northerly abutment as well.

In addition to this there was a 54-inch gas tunnel built through sand about 42 feet downstream from the deep piers and 11 feet above their bottom. On the northerly approach to the bridge the dredging necessary for the piers and sea wall caused a movement of the fill in the old street, which at times gave considerable anxiety. The first step taken, therefore, on the construction was to reinforce the floor of the downstream half of the old bridge and draw, and relocate the outbound surface car track along this side of the old bridge. Borings taken along the side of the new bridge indicated a bottom of soft or medium blue clay, overlaid with silt and gray sand varying from fine to quite coarse, and in depths of from 4 feet to 20 feet. The bottoms of all the piers penetrated to this clay formation.

Dredging was begun on the northerly end of the bridge site, from near the north abutment of the old bridge to the abutment of the new bridge. The soft material of sand and silt encountered here gave considerable trouble until the pier caissons were actually landed, as it was constantly pushing in from the street side.

The box-caisson method of construction was used in all cases except one of the channel piers where the spliced steel sheet piling method was used, the lower section to remain in place. The box-caisson method of construction proved to be very satisfactory and efficient. It was carried on by the contractor in the following manner. The site of the pier was first dredged to a depth of about 3 feet below the cut-off of the piles, which were then driven and cut to grade by a circular saw mounted on the pile driver gins. Guide piles were then driven around the site of the pier, the caissons floated in place, gradually sinking to position as the concrete forms inside them were filled. The bottoms of the caissons were really concrete scows, the bottom dimensions being of the exact sizes of the pier footings and were 4 feet in height, being divided into compartments about 9 feet wide by cross partitions. Around the bottom there projected a lip or flange having eye-bolts cast into it, to which the wooden sides were attached by hook bolts extending for the full height of the sides, and were tightened by set nuts seating on the top sills. The concrete caissons were built on ways and launched at the north end of the bridge. The floor was of 3-inch spruce plank, greased and laid on the ways in such a manner that by sawing through six planks the caisson was launched. The planks were thickly studded with 20d. nails to hold the concrete floor and sides which were cast directly in the forms. The caissons were thoroughly reinforced, the sides and flange being 12 inches, the bottom 6 inches and the partitions 9 inches thick, made of 1-2-4 concrete. Wooden sides were made in two sections, the bottom one being 16 feet and the top one 17 feet in height. The frame was of 10-inch by 10-inch and 10-inch by 12-inch hard pine, the bottom set was sheathed with 3-inch planed spruce, and the top set was sheathed with 2-inch planed spruce. The edges of the plank were beveled to provide for calking with oakum. These sides were used from three to four times each, and on account of their substantial and careful construction gave no trouble whatever; in many cases a single 3-inch duplex pump would handle all the leakage, in many instances under 14 feet to 15 feet head, by pumping a few moments at a time.

The largest caisson sunk, which was 124.6 feet long and 19.5 feet wide, was successfully launched with lower sides in place, floated and sunk without trouble.

For the trunnion pier a cofferdam of 14-inch arched (35-pound) Lackawanna steel sheet piling was used. Previous to driving this sheeting the area covered by the new channel piers and the channel above and below the old bridge was dredged to about 20 feet below low water. The upstream half of the old bridge had been removed and a bulkhead of oak piles with spur shores upstream had been driven to prevent a movement of the river bottom over the gas tunnel. Then the downstream end of the steel cofferdam was driven close against the remaining half of the old bridge. After this the dredging was completed to about grade minus 32, the piles were driven and the tops were left at about grade minus 29.

In driving the 30-foot piles for this pier and the pier at the heel of the draw span it was found that they would go their full length with from four to five blows. The pile driver used was a heavy Vulcan No. 1 steam hammer, weighing about 8,500 pounds, and with the extension gins attached made a total weight of between five and one half and six tons. Longer piles were decided upon, and new ones from 40 feet to 45 feet were driven. A test was made on one of each length of piles the following morning, and it required eleven blows on the 30-foot and thirteen blows on the 40-foot pile to set them down one foot. The steel cofferdam was then completed, after which concrete was deposited under water inside of it to grade minus 24 by means of bottom dumping buckets. The cofferdam was then unwatered and the balance of the work done in the dry.

The top of concrete deposited under water was cleared, and the new work was carried on by building pockets of concrete mixed 1-2-4 placed dry in onion sacks. These pockets were about 20 feet long, 2 feet high, conforming on the outside edge to the lines of the foundation; the dam of bags left a space of 2 feet between it and the steel sheeting for drainage, and provided a dry interior for placing the new concrete. At times this work was carried on under 34-foot head of water outside the cofferdam.

There was nothing of peculiar interest in the stone masonry work. The seats for all posts and bearings were left $\frac{1}{2}$ inch high, to be dressed in the field to exact grade. This proved to be a wise precaution in several instances, as the coping stones were cut rather full.

The steel superstructure as built consists of four

parts — the highway draw, the railway draw, the operator's house and the railway viaduct.

The highway draw is designed to carry fifty-ton electric cars and heavy city traffic. It consists of two pony trusses 12 feet deep, with plate girder floor beams and steel stringers. The trusses are 102 feet long from the center of the trunnions to the end bearing, and are 43 feet apart, the sidewalks being carried on 8-foot brackets outside of the trusses. The roadway floor has a wearing surface of 4-inch wide kreolited maple and beech planks, set on edge and laid at right angles to the roadway. They are supported by 4-inch by 8-inch hard pine longitudinal stringers laid 16 inches on centers, and these in turn are carried by 6-inch by 8-inch hard pine cross ties spaced 2 feet on centers and bolted to the longitudinal steel stringers at each bearing point. The sidewalks are of 2-inch plank, nailed to 4-inch by 6-inch spiking pieces that are bolted to the tops of the steel stringers.

One end of the span is carried by trunnions. These are steel shafts 16 inches in diameter and 5 feet long, that rest in bronze-lined boxes. The boxes are supported by triangular trusses that distribute the load to two piers 30 feet apart. These piers extend upstream to carry the operator's house and the railway span. The main trusses extend 15 feet beyond the trunnions and carry at these points a counterweight of 750 tons. This weight is a block of reinforced concrete 30 feet by 20 feet by 45 feet in size, and supported by two posts that rest on pins in the trusses. These pins are in a straight line with the trunnion and the center of gravity of the entire span. The upper ends of the posts are connected by a link to posts that rest on top of the trunnions. This link, being parallel to the line from the trunnion to the counterweight pin, holds the weight always vertical, and the bridge is therefore in balance in all positions if balanced in any one position. The trunnions carry the live load as well as the dead load, the total amount being about 1,200 tons, and the pressure on the bearings about 2,000 pounds per square inch.

The highway span is operated by a train of gears driven by two 35 horse power motors, the last pinions of the train driving circular racks that are bolted to the trusses with the trunnions as their centers. The rack teeth are $4\frac{1}{2}$ -inch pitch by 10-inch face. All gearing and boxes are of steel. Motor-driven latches on the

forward ends of the trusses hold the span fast when closed, and a 12-inch dashpot is provided to lessen the jar when closing. The highway draw was erected in the closed position.

The highway span contains about 300 tons of steel, 30 tons of machinery and 50,000 feet of lumber.

The railway draw consists of two deck plate girder spans 120 feet long, placed side by side and capable of being operated by two 25 horse power motors, as one unit or separately.

The operator's house is between the two draw spans. It is a steel frame building 13 feet by 40 feet in plan, and five stories in height, and contains about twenty-five tons of steel. The walls and floors are of concrete. The operator's room is on the top floor, and contains two switch boards and the controllers, brake levers, signals, etc. The entire wire system for operating, lighting, signaling and protecting each bridge is kept separate from the other. Automatic cut-out devices, interlocking mechanisms, lamp signals and other safeguards are provided to aid the operators and to prevent injury to the machinery from careless handling. The motors for the highway draw are under the sidewalks of the approach span, and are in metal houses that also cover most of the gearing and the mechanical brakes. The motors for the railway draw are in the second story of the house. All exposed gearing is protected by gear covers; and foot walks, stairways and ladders are provided for access to all parts.

FERRY SERVICE.

The work in progress at the date of the report of last year, under a contract with W. S. Rendle, dated June 26, 1917, for repairing piers of the North and South Ferries at both the Boston and East Boston landings, was completed June 5, 1918, at a total cost of \$11,518.20.

The work done, in addition to that noted in last year's report, has been the driving of some new piles in the heads of the south pier of the North Ferry at the Boston landing and rechaining the clump at the end of this pier.

At the East Boston landing, South Ferry, new piles were driven in the heads of both the north and middle piers, new girders and wales put in where necessary and the clumps of both piers rechained. At the south pier, at this landing, a number of new girders were put in and about seventy-five feet in length of this pier was faced with yellow pine plank covering the heads of the bolts projecting beyond the old planking, which had caused considerable injury to the guard timbers on the ferry-boats.

At the Boston landing of the South Ferry, new piles were driven in the heads of both the middle and south piers and the clumps rechained.

The roadway of the south drop at the Boston landing of the South Ferry was rebuilt this year under a contract with John B. Dolan, approved June 14, 1918. Under this contract the "Shuman" paving and lower planking of the roadway were removed, new, yellow pine planking laid and such floor timbers as were in poor condition were replaced with new timber.

The supplementary drop was also entirely rebuilt. The work was completed July 27, 1918, at a total cost of \$2,207.54. A new wearing surface of the "Shuman" type was laid on this drop by W. S. Rendle at a cost of \$1,011.85. Some new rods were placed in the trusses of this drop, owing to extreme corrosion of the old rods.

The wharf adjoining the coal pocket at the South Ferry, East Boston side, which has been in dangerous condition for several years, has had such repairs made

during the year as were necessary to make it safe for use, under a contract with W. H. Ellis & Son Company, approved July 2, 1918. The work was completed July 26, 1918, at a total cost of \$1,970.22.

A contract was made with W. S. Rendle, approved December 28, 1918, for rebuilding the drop foundation and roadway supplementary of the north drop at the East Boston landing of the North Ferry. Work was begun January 10, 1919, and will be completed about the middle of February.

As mentioned in the 1917 report, the "General Sumner" was badly burned on the night of December 29, 1917. A contract with the Boston Shipbuilding Company to make complete repairs and renewals to the boat was approved April 24, 1918, for the sum of \$69,000. At the time of signing the contract it was decided to remodel this boat for four roadways instead of two as originally built. Work began on the boat as soon as the contract was approved and the work has been practically completed. The teaming capacity of the boat is increased about 50 per cent but the capacity for foot passengers has decreased very materially.

Ventilating Systems on Wooden Boats.

Owing to a ruling of the Board of Supervising Inspectors of Steam Boats, all openings in the hulls of wooden boats below decks were closed, necessitating the installation of a ventilating system.

A contract was made on May 31, 1917, with Joseph A. Nelson, for the installation of the ventilating systems, including the furnishing of blowers, engines and necessary galvanized iron. War conditions seriously delayed the delivery of the apparatus and the work was not completed until December 20, 1918. The amount paid under the contract was \$3,731.60.

The ferryboat "Noddle Island" was taken out on the railway on March 1, 1918, as she was leaking badly at the ends. Both ends were calked, some new metal was put on the ends and seven propeller blades were replaced by ones that had been previously repaired.

The "General Sumner" was taken out on the railway on September 12, 1918, and some repairs made. The copper on the hull, which was in very poor condition, was taken off and the hull painted.

The "Governor Russell" was pulled out on the railway on December 29, 1918; the bottom was cleaned, six of the propeller blades were replaced with ones that had been previously repaired; two blades were straightened; the rudder and supports were repaired and the bottom was patched with new metal.

Respectfully submitted,

JOHN E. CARTY,
Division Engineer.

BRIDGE SERVICE.

FINANCIAL STATEMENT, 1918-19.

Expenditures from Maintenance Appropriation.

Bridge Service:		
Boston bridges	\$323,601 28	
Boston and Cambridge bridges	23,942 63	
	<u> </u>	<u>\$347,543 91</u>

Total Expenditures.

From maintenance appropriation	\$347,543 91	
From special appropriations	104,679 89	
From Strandway and Old Harbor Improvement	261,313 15	
	<u> </u>	<u>\$713,536 95</u>

EXPENDITURES ON BOSTON BRIDGES.

(1.) Administration:		
Salaries:		
Division engineer	\$3,750 00	
Supervisors	4,744 50	
Engineers and draughtsmen	16,722 45	
Clerk and stenographer	1,495 52	
Inspectors	3,357 50	
Medical inspector	83 33	
Pensions:		
Veterans	\$4,317 18	
Laborers	1,080 00	
	<u> </u>	5,397 18
Holiday time		985 68
Vacations (mechanics)		1,588 00
Pay allowed injured employees		818 00
Paid to employees in war service of United States		4,127 34
		<u> </u>
		\$43,069 50
Printing, postage and stationery		783 48
Travel expenses		298 83
Telephones		151 24
Furnishings		14 80
Engineers' supplies and instruments		358 35
Typewriter inspection		30 00
Photographs		100 50
		<u> </u>
		<u>\$44,806 70</u>

PUBLIC WORKS DEPARTMENT.

105

(2.) Yard and Stockroom:

Yard:

Employees: Clerk, janitor and watch-

men \$3,093 12

Light 93 46

Fuel 217 89

Supplies 34 66

Repairing building 576 90

\$4,016 03

Stockroom (lumber, nails and supplies for bridges) .

7,742 53

Stable:

Wages of stablemen \$3,779 00

Feed and straw 1,204 50

Shoeing and clipping horses 162 38

Veterinary 30 00

Outside care of horses 623 49

Repairs to vehicles 341 32

Stable supplies 16 63

6,157 32

\$17,915 88

(3.) Automobiles:

Division engineer:

Wages of chauffeur \$777 00

Storage \$180 00

Repairs 941 26

Supplies 92 13

Gasolene 282 81

New tires and tubes 178 54

Repairs to tires and tubes, 27 35

Registration 20 00

1,722 09

New Buick touring car (net) 1,470 00

\$3,969 09

Supervisor of Bridges:

Wages of chauffeur \$1,050 00

Storage \$150 00

Repairs 122 01

Supplies 61 52

Gasolene 241 43

New tires and tubes 161 15

Repairs to tires and tubes, 2 50

Registration 20 00

758 61

1,808 61

Auto truck:

Gasolene \$167 64

Repairs 52 08

Supplies 86 46

Registration (3 trucks) 8 00

\$314 18

Two new trucks 1,372 80

1,686 98

\$7,464 68

(4.) BRIDGES.

Expenditures on Tidewater Bridges.

BRIDGES.	Draw- tenders' Salaries.	REPAIRS.			Supplies and Miscella- neous Expenses.	Total.
		Mechanics' Wages.	Material.	Repair Bills.		
Broadway.....	\$10,475 68	\$403 47	\$60 29	\$102 71	\$202 67	\$11,244 82
Charlestown.....	14,207 96	757 41	1,628 54	382 61	431 11	17,407 63
Chelsea North.....	12,007 11	1,323 57	29 22	4,891 18	569 24	18,820 32
Chelsea South.....	10,395 60	2,034 60	1,215 52	102 75	310 44	14,058 91
Chelsea Street.....	8,576 49	487 94	46 07	142 59	226 03	9,479 12
Congress Street.....	10,760 09	1,126 36	484 78	5,398 94	959 02	18,729 19
Dorchester Avenue.....	10,378 61	611 19	23 60	1,761 98	347 34	13,122 72
Dover Street.....	10,394 42	1,170 54	988 55	339 35	219 04	13,111 90
L Street.....	10,359 72	294 82	204 94	2,199 37	309 74	13,368 59
Malden.....	10,686 01	384 91	24 48	144 92	167 92	11,408 24
Meridian Street.....	10,747 40	876 46	134 42	362 96	434 53	12,555 77
Neponset.....	2,758 56	110 01	113 47	28 59	10 44	3,021 07
Northern Avenue.....	11,835 10	2,180 50	1,084 48	2,201 22	4,232 02	21,533 32
Summer Street.....	10,739 31	2,545 99	1,247 32	4,771 51	480 90	19,785 03
Warren.....	10,440 40	1,285 44	1,275 33	1,997 18	1,128 69	16,127 04
Western Avenue to Watertown.....	398 84	40 83	177 44	.....	.....	617 11
Total.....	\$155,161 30	\$15,634 04	8,738 45	\$24,827 86	\$10,029 13	\$214,390 78
Dover Street: New Boat.....						168 00
						\$214,558 78

Repairs on Inland Bridges.

BRIDGE.	Labor and Materials.
Albany street (over Boston & Albany Railroad freight tracks)	\$1,416 02
Allston Bridge	5,506 88
Ashland street	598 11
Ashmont street	243 43
Austin street	307 10
Beacon street (over Boston & Albany Railroad)	339 04
Bennington street	282 16
Berkeley street	172 19
Blakemore street	1,463 18
Blue Hill avenue	19 44
Boston street	87 74
Boylston street	50 78
Broadway (over Boston & Albany Railroad)	2,608 03
Broadway (over New York, New Haven & Hartford Railroad)	4,759 04
Brookline avenue	152 94
Byron street	117 53
Canterbury street	52 20
Central avenue	643 42
Chelsea Bridge (over Boston & Maine Railroad)	35 30
Columbus avenue	254 50
Commercial Point	2,286 12
Dartmouth street	4,401 15
Dorchester avenue (New York, New Haven & Hartford Railroad, Plymouth Division).	11 00
Everett street	90 41
Fairmount avenue (Hyde Park)	23 00
Ferdinand street	13 50
Glenwood avenue (Hyde Park)	234 13
Glenwood avenue (over Mother brook, Hyde Park)	34 66
Harrison avenue	3,863 10
Harvard street	12 11
Hyde Park avenue (over Mother brook)	338 75
Hyde Park avenue (over Stony brook)	135 62
Irvington street (footbridge)	6 00
Massachusetts avenue (over New York, New Haven & Hartford Railroad, Providence Division).	522 42
<i>Carried forward</i>	\$31,081 00

Repairs on Inland Bridges.—Concluded.

BRIDGE.	Labor and Materials.
<i>Brought forward</i>	\$31,081 00
Metropolitan avenue (Hyde Park).....	358 65
Milton street (Hyde Park).....	110 97
Mystic avenue.....	18 88
New Allen street (Hyde Park).....	53 01
Norfolk street (North).....	309 39
Norfolk street (South).....	605 24
Oakland street.....	556 12
Perkins street.....	46 48
River street (Hyde Park).....	133 69
Southampton street (over railroad).....	181 27
Summer street (over A street).....	620 73
Tollgate way (footbridge).....	14 50
Washington street (Milton Lower Mills).....	15 49
Webster street.....	134 71
West Fourth street.....	2,038 14
West Newton street.....	263 81
Miscellaneous:	
Labor, removing snow and sweeping bridges.....	2,113 18
Total	\$38,655 26

(5.) Public Landing, East Boston:

Rent	<u>\$199 98</u>
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SUMMARY OF EXPENDITURES.

(1) Administration	\$44,806 70
(2) Yard, stable and stockroom	17,915 88
(3) Automobiles	7,464 68
(4a) Tidewater bridges	214,558 78
(4b) Inland bridges	38,655 26
(5) Public landings	199 98
Total maintenance expense	<u>\$323,601 28</u>

EXPENDITURES FROM SPECIAL APPROPRIATIONS.

BRIDGES, REPAIRS, ETC.	
Engineering	\$1,300 88
Inspection	390 00
Miscellaneous: Travel expenses and advertising,	91 25
	<u>\$1,782 13</u>

CHELSEA BRIDGE NORTH.

Paid to J. P. Cavanagh Company on contract for rebuilding floor	29,407 99
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PUBLIC WORKS DEPARTMENT.

109

WARREN BRIDGE.

Services of diver	\$315 00
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HARVARD BRIDGE.

Paid to Rowe Contracting Company on contract for planking and paving	10,975 63
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Total	<u>\$42,480 75</u>
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Chelsea Bridge South:

Engineering	<u>\$947 48</u>
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Brookline Avenue Bridge:

Engineering	\$1,443 55
Inspection	260 00
Inspection of material	152 36
Travel expenses, photographs, etc.	14 60
Paid Michael Meehan on contract	38,729 05
	<u>\$40,599 56</u>

Malden Bridge:

Paid to Hugh Nawn Contracting Company on contract	\$19,561 64
Paid to McClintic-Marshall Company on contract	440 46
	<u>\$20,002 10</u>

Winthrop Bridge:

Paid to Lawler Brothers on contract	\$100 00
Executions of court	550 00
	<u>\$650 00</u>

STRANDWAY AND OLD HARBOR IMPROVEMENT.

Engineering	\$9,724 33
Inspection	4,398 62
	<u>\$14,122 95</u>

Services of janitor	180 00
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Paid to employees in war service of United States	565 57
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Office expenses:

Printing, postage and stationery,	\$134 48
Telephones and travel expenses,	101 44
Furnishings	38 68
	<u>274 60</u>

Fuel	59 21
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Photographs	157 30
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Engineers' supplies, tools, instruments, etc.	365 48
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Frames and grates	273 81
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Fertilizer and seed	458 95
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Automobile expenses:

Storage	\$75 00
Repairs	221 30
Supplies	23 35
Gasolene and oil	141 22
Tires and tubes	129 15
Registration	15 00
	<u>605 02</u>

	<u>\$17,062 89</u>
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Paid New York State Dredging Corporation on contract,	227,604 00
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Paid James L. Pierce on contract for artificial stone sidewalks	15,146 26
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Paid James L. Pierce for borings	1,500 00
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	<u>\$261,313 15</u>
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SUMMARY.
Expended from Special Appropriations in Charge of Bridge Service.

	Balances from 1917.	Total Credits for 1918.	Expended, 1918.	Total Expended to January 31, 1919.	Balances Unexpended, January 31, 1919.
Bridges, repairs, etc.....	.....	\$270,500 00	\$1,782 13	\$1,782 13	
Chelsea Bridge North.....	.....	.....	29,407 99	29,407 99	
Warren Bridge.....	.....	.....	315 00	315 00	
Harvard Bridge.....	.....	.....	.....	10,975 63	
Total.....	.....	.....	\$31,505 12	\$42,480 75	\$228,019 25
* Broadway Bridge (Boston & Albany Railroad).....	\$3,383 93	.....	.....	.....	12,502 31
Brookline Avenue Bridge.....	53,101 87	53,101 87	36,522 75	40,599 56	18,797 39
Chelsea Bridge South.....	19,744 87	19,744 87	947 48	947 48	
Malden Bridge.....	.....	.....	20,002 10	20,002 10	
* Meridian Street Bridge.....	1,330 98	.....	.....	.....
* Spring Street Bridge.....	1,676 16	.....	.....	.....
* Winthrop Bridge.....	4,466 56	4,466 56	650 00	650 00	
Strandway and Old Harbor Improvement.....	359,601 56	359,601 56	280,220 09	261,313 15	98,288 41
Totals.....	\$443,305 93	\$707,414 86	\$349,847 54	\$365,993 04	\$357,607 36

* Balances transferred to refuse destructor site, Spectacle Island.

EXPENDITURES ON GRANITE AVENUE BRIDGE BY COUNTY OF SUFFOLK
(1918-19).

Salaries of drawtenders	\$1,664 60
Fuel	19 18
Light	8 87
Printing	11 82
Stationery	95
Kerosene oil	55
Material	2 03
Repairs	523 74
	<u>\$2,231 74</u>
Appropriation	\$2,488 80
Expenditures	<u>2,231 74</u>
Balance returned to County Treasurer January 31, 1919 . . .	<u>\$257 06</u>

BRIDGE SERVICE.

AMOUNT PAID INTO CITY TREASURY DURING THE YEAR (1918-19).

By town of Milton for labor on Granite Avenue Bridge . . .	\$52 75
By County of Suffolk for labor on Granite Avenue Bridge . .	52 75
By Abraham Sterman for repairs to Chelsea Bridge North draw, damaged by automobile	53 16
Redemption of mileage books (Boston & Albany Railroad) . .	12 85
Redemption of mileage books (New York, New Haven & Hart- ford Railroad)	1 68
Second payment of car tickets refunded by Boston Elevated Railway Company	5 00
City of Cambridge, sale of old material from Harvard Bridge, .	7 57
	<u>\$185 76</u>

LIST OF BOSTON BRIDGES.

I.—BRIDGES WHOLLY MAINTAINED BY BOSTON.

[In the list those marked with an asterisk (*) are over navigable waters, and are each provided with a draw.]

In Charge of Bridge and Ferry Division.

- Allston, over Boston & Albany Railroad at Cambridge street, Brighton.
- Ashland street, over New York, New Haven & Hartford Railroad, Providence Division, West Roxbury.
- B street (footbridge), over Neponset river, Hyde Park.
- Baker street, at Brook Farm, West Roxbury.
- Beacon street, over outlet to Back Bay Fens.
- Beacon street, over Boston & Albany Railroad.
- Bennington street, over Boston, Revere Beach & Lynn Railroad.
- Berkeley street, over Boston & Albany Railroad.
- Blakemore street, over New York, New Haven & Hartford Railroad, Providence Division.
- Boylston street, over Boston & Albany Railroad.
- Broadway, over Boston & Albany Railroad.
- * Broadway, over Fort Point channel.
- Brookline avenue, over Boston & Albany Railroad.
- Brooks street, Brighton.
- Byron street, over Boston, Revere Beach & Lynn Railroad.
- Charlesgate, in Fens, over Ipswich street.
- * Charlestown, from Boston to Charlestown.
- * Chelsea South (temporary), over south channel, Mystic river.
- * Chelsea street, from East Boston to Chelsea.
- Columbus avenue, over Boston & Albany Railroad.
- Commercial Point, or Tenean, Dorchester.
- * Congress street, over Fort Point channel.
- Dana avenue, over Neponset river, Hyde Park.
- Dartmouth street, over Boston & Albany Railroad.
- * Dorchester avenue (formerly Federal street), over Fort Point channel.
- * Dover street, over Fort Point channel.
- Fairmount avenue, over Neponset river, Hyde Park.
- Ferdinand street, over Boston & Albany Railroad.
- Florence street, over Stony brook, West Roxbury.
- Gainsborough street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
- Glenwood Avenue East (footbridge), over Neponset river, Hyde Park.
- Glenwood Avenue West, over Mother brook, Hyde Park.
- Gove street (footbridge), over Boston & Albany Railroad, East Boston.
- Huntington avenue, over Boston & Albany Railroad.

Huntington avenue, over Stony brook, Hyde Park.

Hyde Park avenue, over Mother brook (at woolen mill), Hyde Park.

Hyde Park avenue, over Stony brook, West Roxbury.

Hyde Park avenue, over Stony brook (near Clarendon Hill Station), Hyde Park.

Ipswich street, in Fens, over waterway.

Irvington street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.

Jones avenue (footbridge), over New York, New Haven & Hartford Railroad, Midland Division.

* Malden, from Charlestown to Everett.

Massachusetts avenue, over Boston & Albany Railroad.

Massachusetts avenue, over New York, New Haven & Hartford Railroad, Providence Division.

* Meridian street, from East Boston to Chelsea.

Metropolitan avenue (near Clarendon Hills Station), Hyde Park.

Newburn street, over Stony brook, Hyde Park.

* Northern avenue, over Fort Point channel.

Pembroke street, formerly Berwick park (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.

Shawmut avenue, over Boston & Albany Railroad and New York, New Haven & Hartford Railroad, Providence Division.

Southampton street, over South bay sluice.

Summer street, over A street.

Summer street, over B street.

Summer street, over C street.

* Summer street, over Fort Point channel.

* Summer street, over Reserved channel, South Boston.

Tollgate way (footbridge), over Providence Division, from Washington street to Hyde Park avenue, Forest Hills.

* Warren, from Boston to Charlestown.

West Newton street, over New York, New Haven & Hartford Railroad, Providence Division.

West River street, over Mother brook, Hyde Park.

West Rutland square (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.

Wordsworth street (footbridge), over Boston, Revere Beach & Lynn Railroad, East Boston.

In Charge of Bridge and Ferry Division and Park and Recreation Department.

Columbia road, over New York, New Haven & Hartford Railroad, Old Colony Division.

Columbia road, over Shoreham street.

In Charge of Park and Recreation Department.

Agassiz road, in Fens.

Audubon road, in Riverway, over Boston & Albany Railroad.

Berners street (footbridge), over Bridle path in Riverway.

Boylston street, in Fens, over waterway.
 Bridle path, in Riverway, over Muddy river.
 * Castle Island (footbridge), in Marine Park, South Boston, to
 Castle Island.
 Charlesgate, in Fens, over Boston & Albany Railroad.
 Circuit drive, over Scarboro pond, in Franklin Park.
 Commonwealth avenue, in Fens, over waterway.
 Cottage Farm, over Boston & Albany Railroad, at Common-
 wealth avenue.
 Ellicott Arch, in Franklin Park.
 Fens, in Fens.
 Forest Hills entrance, in Franklin Park.
 Leverett pond (footbridge), in Olmsted Park.
 Neptune road, in Wood Island Park, over Boston, Revere
 Beach & Lynn Railroad.
 Norfolk Street Playground (footbridge), over Midland Division,
 New York, New Haven & Hartford Railroad.
 Public Garden (footbridge).
 Scarboro pond (footbridge), in Franklin Park.
 Wood Island (footbridge), in Wood Island Park.

II.— BRIDGES OF WHICH BOSTON MAINTAINS THE PART WITHIN ITS LIMITS.

In Charge of Bridge and Ferry Division.

Central avenue, from Dorchester to Milton.
 * Chelsea North, from Charlestown to Chelsea.
 Milton, from Dorchester to Milton.
 North Beacon street, from Brighton to Watertown.
 Paul's Bridge, over Neponset river, Hyde Park.
 Spring street, from West Roxbury to Dedham.
 * Western avenue, from Brighton to Watertown.
 Winthrop, from Breed's Island to Winthrop.

In Charge of Park and Recreation Department.

Bellevue street, in the Riverway, over Muddy river.
 Berners street (footbridge), over Muddy river.
 Brookline avenue, in the Riverway, over Muddy river.
 Huntington avenue, in the Riverway, over Muddy river.
 Longwood avenue, in the Riverway, over Muddy river.

III.— BRIDGES OF WHICH BOSTON PAYS A PART OF THE COST OF MAINTENANCE.

In Charge of Bridge and Ferry Division.

Albany street, over Boston & Albany Railroad (over freight
 tracks).
 Ashmont street and Dorchester avenue, over New York, New
 Haven & Hartford Railroad, Old Colony Division.
 Harvard street, over New York, New Haven & Hartford Rail-
 road, Midland Division.

Morton street, over New York, New Haven & Hartford Railroad, Midland Division.

Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Dorchester station.

Pleasant street, over the subway.

Walworth street, over New York, New Haven & Hartford Railroad, Providence Division.

In Charge of Commissioners for Boston and Cambridge Bridges.

Anderson Bridge, from Brighton to Cambridge.

Brookline street, from Brighton to Cambridge.

Cambridge, from Boston to Cambridge.

* Cambridge street, from Brighton to Cambridge.

* Harvard, from Boston to Cambridge.

* Prison Point, from Charlestown to Cambridge.

* Western avenue, from Brighton to Cambridge.

In Charge of Commissioners for Granite Avenue Bridge.

* Granite avenue, from Dorchester to Milton.

IV.— BRIDGES OF WHICH BOSTON MAINTAINS THE WHOLE OR A PART OF THE WEARING SURFACE.

In Charge of the Bridge and Ferry Division.

Austin street, over Boston & Maine Railroad, Charlestown.

Bennington street, over Boston & Albany Railroad.

Blue Hill avenue, over New York, New Haven & Hartford Railroad, Midland Division.

Boston street, over New York, New Haven & Hartford Railroad, Old Colony Division.

Brookline street, Brighton, to Cambridge, portion over Boston & Albany Railroad.

Cambridge street, Charlestown, over Boston & Maine Railroad.

Chelsea, over Boston & Maine Railroad.

Curtis street, East Boston, over Boston & Albany Railroad.

Dana avenue, over New York, New Haven & Hartford Railroad, Midland Division, Hyde Park.

Dorchester avenue, over New York, New Haven & Hartford Railroad, Old Colony Division.

Everett street, over Boston & Albany Railroad, Brighton.

Fairmount avenue, over New York, New Haven & Hartford Railroad, Midland Division, and Station street, Hyde Park.

Glenwood Avenue West, over passageway connecting land of the New York, New Haven & Hartford Railroad, Hyde Park.

Hyde Park avenue, over proposed electric connection between Midland and Providence Division, New York, New Haven & Hartford Railroad, Hyde Park.

Maverick street, East Boston, over Boston & Albany Railroad.

Milton street, Hyde Park, over New York, New Haven & Hartford Railroad.
 Mystic avenue, over Boston & Maine and Boston & Albany Railroads.
 New Allen street, Hyde Park, over New York, New Haven & Hartford Railroad.
 Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Blue Hill Avenue Station.
 Oakland street, over New York, New Haven & Hartford Railroad, Midland Division, Mattapan.
 Perkins street (footbridge), over Boston & Maine Railroad.
 Porter street, over Boston & Albany Railroad.
 Prescott street, over Boston & Albany Railroad.
 Redfield street, at Neponset, over New York, New Haven & Hartford Railroad, Old Colony Division.
 Reservoir road, Brighton, over Boston & Albany Railroad, Newton Branch.
 Saratoga street, over Boston & Albany Railroad.
 Saratoga street, over Boston, Revere Beach & Lynn Railroad, East Boston.
 Southampton street, over New York, New Haven & Hartford Railroad, Old Colony Division.
 Sprague street, over New York, New Haven & Hartford Railroad, Midland Division, and branch of Providence Division, Hyde Park.
 Summer street, over New York, New Haven & Hartford Railroad, Midland Division.
 Sumner street, East Boston, over Boston & Albany Railroad.
 Webster street (footbridge), East Boston, over Boston & Albany Railroad.
 West Fourth street, over New York, New Haven & Hartford Railroad, Old Colony Division.

V.—BRIDGES MAINTAINED BY METROPOLITAN PARK COMMISSION.

* Charles River Dam.
 Mattapan, over Neponset river.
 * Neponset, from Dorchester to Quincy.

VI.—BRIDGES WHOLLY MAINTAINED BY RAILROAD CORPORATIONS.

1st.—Boston & Albany.

Albany street (over passenger tracks).
 Harrison avenue.
 Market street, Brighton.
 Tremont street.
 Washington street.

2d.—Boston & Maine and Boston & Albany Railroads.

Main street.

3d.— Boston & Maine Railroad, Eastern Division.

Wauwatosa avenue, East Boston.

4th.— Boston, Revere Beach & Lynn Railroad.

Everett street.

5th.— New York, New Haven & Hartford Railroad, Midland Division.

Athens street.

Bolton street.

Dorchester avenue.

East River street, at River Street Station, Hyde Park.

Silver street.

Gold street.

Washington street, Dorchester.

West Broadway.

West Fifth street.

West Fourth street.

West Second street.

West Sixth street.

West Third street.

6th.— New York, New Haven & Hartford Railroad, Old Colony Division.

Adams street.

Cedar Grove Cemetery.

Medway street.

Savin Hill avenue.

7th.— New York, New Haven & Hartford Railroad, Providence Division.

Albany street.

Baker street, West Roxbury.

Beech street, West Roxbury.

Bellevue street, West Roxbury.

Berkeley street.

Broadway, South Boston.

Canterbury street, West Roxbury.

Arlington square.

Centre and Mt. Vernon streets, West Roxbury.

Columbus avenue.

Dartmouth street.

Gardner street, West Roxbury.

Harrison avenue.

Park street, West Roxbury.

Washington street.

West street, Hyde Park.

West River street, Hyde Park.

VII.— BRIDGES MAINTAINED BY THE UNITED STATES
GOVERNMENT.

* Victory Bridge (over Neponset River), from Dorchester to Quincy.

RECAPITULATION OF BRIDGES.

I. Number wholly maintained by Boston:	
In charge of Bridge and Ferry Division	62
In charge of Bridge and Ferry Division and Park and Recreation Department	2
In charge of Park and Recreation Depart- ment	19
	— 83
II. Number of which Boston maintains the part within its limits:	
In charge of Bridge and Ferry Division	8
In charge of Park and Recreation Depart- ment	5
	— 13
III. Number of which Boston pays a part of the cost of maintenance:	
In charge of Bridge and Ferry Division	7
In charge of Commissioners for Boston and Cambridge Bridges	7
In charge of Commissioners for Granite Avenue Bridge	1
	— 15
IV. Number of which Boston maintains the whole or a part of the wearing surface	33
V. Number maintained by Metropolitan Park Commission.	3
VI. Number maintained by railroad corporations:	
1. Boston & Albany Railroad	5
2. Boston & Maine and Boston & Albany Railroads	1
3. Boston & Maine Railroad, Eastern Division	1
4. Boston, Revere Beach & Lynn Railroad, New York, New Haven & Hartford Railroad, Midland Division	13
6. New York, New Haven & Hartford Railroad, Old Colony Division	4
7. New York, New Haven & Hartford Railroad, Providence Division	17
	— 42
VII. Number maintained by the United States Government	1
Total number	<u>190</u>

Table Showing the Widths of Channelways for Vessels in all Bridges Over Navigable Waters in the City of Boston in January, 1919.

NAME OF BRIDGE.	Location.	Number of Channelways.	Width.
* Anderson.....	Brighton to Cambridge.....	1	45 feet 0 inches.
Boston Elevated Railway.....	Boston to East Cambridge.....	1	45 " 0 "
Boston Elevated Railway.....	Charlestown to Everett.....	1	75 " 0 "
Boston & Maine Railroad, Eastern Division.	Boston to Charlestown.....	1	39 " 8 "
Boston & Maine Railroad, Eastern Division.	Over Miller's river.....	1	35 " 0 "
Boston & Maine Railroad, Fitchburg Division.	Boston to Charlestown.....	1	36 " 0 "
Boston & Maine Railroad, Fitchburg Division (for teaming freight).	" "	1	36 " 7 "
Boston & Maine Railroad (freight), Southern Division.	Boston to East Cambridge.....	1	40 " 0 "
Boston & Maine Railroad (passenger), Southern Division.	" "	1	39 " 8 "
Boston & Maine Railroad, Western Division.	Boston to Charlestown.....	1	39 " 4 "
Boston & Maine Railroad, Western Division.	Over Miller's river.....	1	35 " 6 "
Broadway.....	Over Fort Point channel.....	1	50 " 0 "
† Brookline street.....	Brighton to Cambridge.....	1	40 " 0 "
† Cambridge.....	Boston to Cambridge.....	1	50 " 0 "
Cambridge street.....	Brighton to Cambridge.....	1	36 " 6 "
Charles River Dam (lock).....	Boston to East Cambridge.....	1	45 " 0 "
Charlestown (main channel).....	Boston to Charlestown.....	2	{ 50 " 0 "
Charlestown (north channel).....	" "		{ 49 " 9 "
Chelsea (north channel).....	Charlestown to Chelsea.....	2	125 " 0 "
Chelsea (south channel).....	" "	1	48 " 0 "
Chelsea street.....	East Boston to Chelsea.....	1	60 " 0 "
Congress street.....	Over Fort Point channel.....	1	50 " 0 "
Dorchester avenue.....	" "	1	41 " 3 "
Dover street.....	" "	1	40 " 6 "
Grand Junction Railroad.....	Brighton to Cambridge.....	1	39 " 3 "
Grand Junction Railroad.....	East Boston to Chelsea.....	1	60 " 0 "
Granite avenue.....	Dorchester to Milton.....	1	50 " 0 "
Harvard (Boston side).....	Boston to Cambridge.....	2	{ 36 " 7 "
Harvard (Cambridge side).....	" "		{ 37 " 0 "

* Drawless channelway; clear headroom of 12 feet above basin level (about elevation 8.0).

† Drawless channelway; clear headroom of 28 feet above basin level.

Table Showing Widths of Channelways, etc.—*Concluded.*

NAME OF BRIDGE.	Location.	Number of Channelways.	Width.
Malden.....	Charlestown to Everett.....	1	75 feet 0 inches.
Meridian street.....	East Boston to Chelsea.....	1	100 " 0 "
Neponset (temporary).....	Dorchester to Quincy.....	1	36 " 0 "
New York, New Haven & Hartford Railroad.	Over Fort Point channel.....	1	41 " 8 "
New York, New Haven & Hartford Railroad, Plymouth Division.	Dorchester to Quincy.....	1	51 " 0 "
* North Beacon street.....	Brighton to Watertown.....	1	45 " 0 "
Northern avenue.....	Over Fort Point channel.....	2	75 " 3 "
Prison Point.....	Charlestown to Cambridge.....	1	37 " 4 "
Summer street.....	Over Fort Point channel.....	1	50 " 0 "
Summer street.....	Over Reserved channel, South Boston.....	1	39 " 3 "
Victory.....	Dorchester to Quincy.....	1	50 " 0 "
Warren.....	Boston to Charlestown.....	1	36 " 0 "
Western avenue.....	Brighton to Cambridge.....	1	36 " 0 "
Western avenue.....	Brighton to Watertown.....	1	36 " 0 "

* Drawless channelway; clear headroom of 12 feet above basin level (about elevation 8.0).

Table Showing Number of Vessels Passing through Drawbridges, February 1, 1918, to January 31, 1919.

BRIDGE.	STEAMERS.			SAILING VESSELS.			TUGS.			BARGES.			ALL OTHERS.			TOTAL NUMBER OF VESSELS.			Total Number of Carriages.	Total Number of Openings.
	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.		
	Night.			Night.			Night.			Night.			Night.			Night.				
Broadway.....	70	13	83	86	.....	86	2,436	36	2,472	617	14	631	879	22	901	4,088	85	4,173	829	1,477
Charlestown.....	.....	.....	.....	69	2	71	1,698	105	1,803	553	57	610	605	177	782	2,925	341	3,266	676	1,184
Chelsea North.....	78	10	88	56	3	59	11,153	299	11,452	1,034	17	1,051	4,312	227	4,539	16,633	556	17,189	2,988	7,309
Chelsea South.....	34	4	38	60	6	66	3,188	193	3,381	172	5	177	1,951	117	2,068	5,405	325	5,730	1,468	2,937
Chelsea Street.....	31	13	44	3	.....	3	2,093	817	2,910	9	2	11	1,858	658	2,516	3,994	1,490	5,484	1,347	3,268
Congress street.....	226	11	237	182	15	197	4,597	166	4,763	624	28	652	1,388	55	1,443	6,987	275	7,262	916	3,731
Dorchester avenue.....	52	4	56	85	.....	85	2,438	57	2,495	606	21	627	999	38	1,037	4,180	120	4,300	830	2,268
Dover street.....	50	4	54	85	.....	85	2,409	59	2,468	597	26	623	919	35	954	4,060	124	4,184	830	1,790
Granite avenue.....	.....	.....	.....	3	.....	3	198	.....	198	67	.....	67	424	.....	424	692	.....	692	26	546
Summer street over Re-served channel.	13	.....	13	55	.....	55	2,362	191	2,553	165	4	169	1,679	148	1,827	4,274	343	4,617	621	3,181
Malden.....	13	4	17	6	.....	6	917	46	963	220	20	240	489	62	551	1,645	132	1,777	325	1,001
Meridian street.....	612	136	748	84	3	87	8,145	2,143	10,288	714	158	872	3,621	725	4,346	13,176	3,165	16,341	1,619	9,581
Northern avenue.....	815	357	1,172	168	7	165	7,037	360	7,397	712	33	745	2,995	137	3,132	11,717	894	12,611	1,892	5,390
Neponset.....	.....	.....	.....	1	2	3	242	4	246	69	1	70	202	45	247	514	52	566	54	396
Summer street over Fort Point channel.	226	11	237	182	15	197	4,597	166	4,763	624	28	652	1,388	55	1,443	6,987	275	7,262	916	3,728
Warren.....	16	.....	16	77	1	78	1,599	59	1,658	611	47	658	613	164	777	2,916	271	3,187	664	1,959
Totals.....	2,236	567	2,803	1,132	54	1,186	55,109	4,701	59,810	7,394	461	7,855	24,322	2,665	26,987	90,193	8,448	98,641	16,001	49,746

ELEVATIONS AND DATUM PLANES REFERRED TO BOSTON CITY BASE.

Feet.

- * 0.00 Boston city base. This base is used by the towns of Brookline and Watertown and the cities of Chelsea, Everett, Malden, Newton and Waltham.
- 4.98 Cambridge city base.
- +0.64 Somerville city base.
- 0.00 Metropolitan Park Commission base.
- +0.60 Commission on Waterways and Public Lands.
- 0.00 Metropolitan Water Board base.
- 100.00 Metropolitan Sewerage Board base.
- 100.00 Boston Transit Commission base.
- 100.00 Charles River Commission base.
- 15.45 Old bench mark on coping of old dry dock at Charlestown Navy Yard.
- 15.11 New bench mark on coping of old dry dock at Charlestown Navy Yard, northwest end over crowfoot.
- 5.00 Piles to be cut off for building.
- 12.00 Minimum cellar bottom elevation when not waterproofed.
- 9.82 South Boston base. Formerly in use, now abandoned.
- 0.00 Mean low water about 1830.†
- +0.34 Mean low water, 1867.†
- +0.79 Mean low water, 1902.†
- +0.58 Navy Yard base, 1902.†
- 10.63 Mean high water, 1902.†
- 5.71 Mean sea level, 1902.†
- 9.84 Mean rise and fall of tide, 1902.†

HIGHEST RECORDED TIDES.

Feet.

- 15.62 April 16, 1851, average of seven observations, North Market street and vicinity, leveled on in 1854 by Charles Harris, Surveying Division n. b. 22, p. 54 (15.10 above mean low water, United States Coast Survey Chart of Boston Harbor, 1857).

* Definition of Boston city base: "Boston city base is a datum plane 15 feet above the average height of the sill of the Charlestown dry dock." (Page 552, report of Committee on Charles River Dam, 1903.)

† John R. Freeman, civil engineer, in report to Committee on Charles River Dam, 1903, pp. 562, 569, 570.

Feet.

15.64 December 26, 1909, average of twenty-nine observations, on waterfront, Nut Island to Deer Island, elevations determined in most cases by John H. Edmonds, before January 1, 1910, from points put in for that purpose, 1902 to 1905.

15.50 December 26, 1909, actual elevation at North Ferry, Boston proper, as observed on staff gauge, at high water.

From comparison of contemporary diary and newspaper accounts the only tide of this class prior to 1851, found by John H. Edmonds, was that of February 24, 1722-23, which was in all probability about 16.00.

The following tidal records may be of interest:

High Tides.

[Plane of Reference, Boston City Base.]

FEET.	Date.	When Taken.	By Whom.
16.00	Feb. 24, 1722-23.	By comparison.....	J. H. Edmonds.
15.62	April 16, 1851....	Average of 7 observations.....	Charles Harris.
15.74	April 16, 1851....	Navy Yard, staff gauge.....	Isaac Williams.
14.15	Jan. 23, 1898....	Charlestown Bridge and East Boston Ferries.	
14.94	Nov. 27, 1898....	Average of 15 observations.	
13.72	Nov. 8, 1900....	Malden Bridge.....	F. P. Spalding.
14.19	Nov. 25, 1901....	Average of 10 observations.	
13.60	Dec. 14, 1902....	Average of 11 observations.	
14.83	Jan. 25, 1905....	Average of 34 observations.	
14.70	Jan. 25, 1905....	Inner harbor, 10 observations.	
14.70	Jan. 25, 1905....	North Ferry, Boston proper.....	J. H. Edmonds.
11.90	Dec. 26, 1909....	North Ferry, Boston proper (p. m.).....	J. H. Edmonds.
13.50	Dec. 26, 1913....	North Ferry, Boston proper.....	F. P. Spalding.
13.90	Nov. 20, 1914....	Malden Bridge.....	H. H. McNERLIN.
14.30	Jan. 13, 1915....	North Ferry, Boston proper.....	F. P. Spalding.
14.62	Jan. 13, 1915....	Granite Avenue Bridge.....	G. A. Clough.

Low Tides.

5.60	Nov. 27, 1898....	Deer Island, metropolitan sewer station....	Self-recording gauge.
-3.50	Feb. 1, 1900....	Deer Island, metropolitan sewer station....	Self-recording gauge.
-2.94	Feb. 3, 1900....	South Boston station, Edison Electric....	D. A. Harrington.
-3.00	Feb. 4, 1904....	Deer Island, metropolitan sewer station....	Self-recording gauge.
-3.00	Mar. 23, 1905....	Deer Island, metropolitan sewer station....	Self-recording gauge.

FERRY SERVICE.

The following steam ferryboats are in commission:

Name.	When Built.	Kind.	Length.	Gross Tonnage.
D. D. Kelly.....	1879	Side Wheel	160 ft. 3 in.	550
Hugh O'Brien.....	1883	"	175 " 3 "	645
General Hancock	1887	"	160 " 3 "	577
Governor Russell.....	1898	Propeller	164 " 3 "	713
Noddle Island.....	1899	"	164 " 3 "	710
General Sumner.....	1900	"	164 " 3 "	703
John H. Sullivan.....	1912	"	172 " 3 "	826

FINANCIAL STATEMENT FOR THE YEAR ENDING JANUARY 31, 1919.

1. Receipts.

Total cash receipts during the year	\$88,323 90
Cash in hands of tollmen at beginning of year	200 00
	<u>\$88,523 90</u>
Cash paid over to City Collector	\$88,323 90
Cash in hands of tollmen January 31, 1919	200 00
	<u>\$88,523 90</u>

2. Appropriations and Expenditures.

Received from annual appropriation	\$388,619 50
Received by transfer from Bridge Service	7,488 60
Received from special appropriation	95,000 00
Total appropriations	\$491,108 10
Total expenditures	461,503 02
	<u>\$29,605 08</u>
Balance unexpended, special appropriation	\$27,280 67
Balance unexpended, annual appropriation transferred to City Treasury	2,324 41
	<u>\$29,605 08</u>

3. Result of Operations for the Year.

Receipts for the year (net income)		\$88,323 90
Ordinary expenses	\$393,783 69	
Interest paid on ferry debt	6,063 00	
Depreciation of ferryboats	11,787 34	
Decrease in value of machinery and tools	166 28	
	<u>\$411,800 31</u>	
Less increase in stock of supplies	\$598 00	
Less increase in stock of fuel	<u>6,600 10</u>	
	7,198 10	
Net outgo for the year		<u>404,602 21</u>
Net loss for the year		<u><u>\$316,278 31</u></u>

4. Balance Sheet.
End of Fiscal Year January 31, 1919.

ASSETS.		LIABILITIES.	
AVAILABLE ASSETS:		CURRENT LIABILITIES:	
Cash in hands of tollmen at close of year.....	\$200 00	None.	
Inventory of supplies, viz.:			
Fuel.....	\$9,018 34		
Supplies for maintenance.....	5,418 00		
Rents receivable.....	14,436 34		
	113 54		
Total available assets.....	\$14,749 88		
CONTINGENT ASSETS:		CONTINGENT LIABILITIES:	
City Treasury.....	27,280 67	Appropriations account.....	\$27,280 67
FIXED ASSETS:		FIXED LIABILITIES:	
Real estate, land and buildings ¹	* 610,100 00	Capital of the city invested in the ferries, viz.:	
Ferryboats ¹	184,668 33	Total expenditures of all kinds for sixty-	
Machinery, tools, etc.....	2,605 72	one years, including interest on ferry	
		debt.....	\$14,085,534 18
Total tangible assets.....	\$839,404 60	Less total receipts.....	7,479,735 68
Deficiency or loss by operation and maintenance	5,793,674 57		
of the ferries for sixty-one years to date.....			6,605,798 50
	\$6,633,079 17		\$6,633,079 17

¹ Original purchase of ferries..... \$276,375 00
 New buildings, drops, slips, cost to date, 607,523 64
 Land, Lincoln's Wharf, cost, 1887 5,562 52
 Land, Battery Wharf, cost, 1893..... 10,000 00
\$399,461 16

² Assessors' figures.
 * Total cost to date, per ferry books..... \$743,070 58
 Less boats sold, depreciation or de- 558,402 25
 strayed.....
\$184,668 33

Comparative Balance Sheets at the Close of Each Year for Five Years.

	January 31, 1915.	January 31, 1916.	January 31, 1917.	January 31, 1918.	January 31, 1919.
<i>Assets.</i>					
Cash, balance on hand.....	\$395 59	\$282 74			
Cash, tollmen's capital.....	200 00	200 00	\$200 00	\$200 00	\$200 00
Rents receivable.....	39 00	42 90	33 40	100 52	113 54
Fuel and supplies in stock.....	14,375 75	6,804 10	12,283 04	7,238 24	14,436 34
City Treasurer (balance of appro- priation).....	15 60	2,015 60	1,775 00		27,280 67
Ferryboats (less depreciation).....	236,527 15	222,335 52	208,995 39	196,455 67	184,668 33
Machinery and tools.....	3,350 00	3,015 00	3,080 00	2,772 00	2,605 72
Real estate, land and buildings (assessors' valuation).....	610,200 00	610,100 00	610,100 00	610,100 00	610,100 00
Total tangible assets.....	<u>\$865,103 09</u>	<u>\$844,795 86</u>	<u>\$836,466 83</u>	<u>\$816,866 43</u>	<u>\$839,404 60</u>
Cost of avenues, etc., East Boston (previous to 1870) ¹	315,815 08	315,815 68	315,815 68	315,815 68	315,815 68
Deficiency of assets (loss).....	4,364,388 68	4,573,128 77	4,805,067 18	5,094,074 27	5,477,858 89
Totals.....	<u>\$5,545,307 45</u>	<u>\$5,733,740 31</u>	<u>\$5,957,349 69</u>	<u>\$6,226,756 38</u>	<u>\$6,633,079 17</u>
<i>Liabilities.</i>					
Capital invested by City of Boston to date.....	\$5,545,291 85	\$5,731,724 71	\$5,955,574 69	\$6,226,756 38	\$6,605,798 50
Appropriations account (credit balances).....	15 60	2,015 60	1,775 00		27,280 67
Total liabilities.....	<u>\$5,545,307 45</u>	<u>\$5,733,740 31</u>	<u>\$5,957,349 69</u>	<u>\$6,226,756 38</u>	<u>\$6,633,079 17</u>

Detail of Capital Invested by the City of Boston.

Total expenditures to date per ferry books.....	\$12,287,566 20	\$12,580,429 67	\$12,900,154 62	\$13,331,024 31	\$13,800,322 33
Interest of debt for the year (per City Auditor).....	15,815 00	15,455 00	14,987 91	7,995 00	6,063 00
Interest previous years, etc. (net debits, per auditor).....	279,148 85	279,148 85	279,148 85	279,148 85	279,148 85
Total expenditures.....	<u>\$12,582,530 05</u>	<u>\$12,875,033 52</u>	<u>\$13,194,291 38</u>	<u>\$13,618,168 16</u>	<u>\$14,085,534 18</u>
Deduct total receipts paid to col- lector.....	7,037,238 20	7,143,308 81	7,238,716 69	7,391,411 78	7,479,735 68
Excess expenditures, capital.....	<u>\$5,545,291 85</u>	<u>\$5,731,724 71</u>	<u>\$5,955,574 69</u>	<u>\$6,226,756 38</u>	<u>\$6,605,798 50</u>

¹ Included in deficiency of assets in Table 4.

Comparison of Receipts, Appropriations and Expenditures for Five Years.

RECEIPTS.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
RECEIPTS.					
From foot passengers (tollmen).....	\$57,762 50	\$54,285 67	\$44,048 14	\$39,690 86	\$37,548 30
" foot passes (office sales).....	589 60	557 40	566 70	513 80	509 30
" extra passengers on teams (gatemmen).....	1,886 29	1,935 17	1,721 33	1,710 71	1,514 59
" team ticket (office sales).....	654 00	1,694 00	2,661 50	2,977 50	3,625 50
" strip team tickets (tollmen).....	23,711 50	24,062 50	23,142 00	23,001 00	19,525 00
" cash fares for teams (gatemmen).....	20,016 24	21,681 01	21,202 55	23,305 45	24,223 99
" free ferries July 4.....	1 00	1 00	1 00	1 00	1 00
Total from rates.....	\$104,621 13	\$104,216 75	\$93,343 22	\$91,199 32	\$86,947 68
From rents.....	497 00	560 10	564 00	514 03	533 83
" old material sold.....	141 26	258 16	594 78	84 35	280 50
" other sources.....	656 05	922 75	623 14	618 83	551 89
Total ordinary receipts.....	\$105,915 44	\$105,957 76	\$95,125 14	\$92,416 53	\$88,323 90
EXPENDITURES (ORDINARY).					
Office:					
Division engineer's salary (part) *	\$1,310 77		\$1,250 00	\$1,250 00	\$1,250 00
General foreman and cashier +	3,753 75		4,341 44	4,253 88	4,288 44
Clerks +	900 00	\$3,758 41	765 00	904 23	663 34
Retired veterans' pensions.....	6,132 74	4,887 51	4,739 45	4,645 58	5,373 07
Retired employees' pensions.....	952 15	1,639 15	2,246 15	3,754 16	3,201 36
Engineers' roll (part) *	1,388 18	197 67			
Medical inspector (part).....			83 00	83 33	83 33
Stationery.....	171 40	117 70	117 59	132 72	138 12
Printing.....	2,233 37	1,124 86	1,258 39	1,263 78	1,662 75
Telephones.....	256 98	267 34	299 54	212 35	205 75
Advertising.....	16 20	10 80	34 60	56 50	36 50
Car fares.....	84 58	63 00	75 00	57 25	57 45
Postage.....		6 00	6 00	6 00	2 00
Premiums, surety companies.....	83 75	85 75	90 00	80 84	86 24
Total, office expenses.....	\$17,285 87	\$13,058 18	\$15,306 16	\$16,700 62	\$17,048 35

[illegible]

* Remainder paid by Bridge Service.

‡ Includes repair of coal carts, analysis of coal, use of towboats, medical attendance, report of coal expert, photographs, expressage.

Part of appropriation for Bridge and Ferry Division applied to "Ferry Service" and transfers from other appropriations.

|| \$2,324.41 of this amount transferred to City Treasury.

Total Expenditures upon Ferries Since 1858-59.

Expenditures for avenues, paving, interest, etc., previous to purchase of the ferries by the city	\$444,101 30
Purchase of ferries, April, 1870	276,375 00
Expenditures for ferryboats since April, 1870 . .	743,070 58
Expenditures for new buildings, piers, drops, etc.	607,523 64
Expenditures for tools and fixtures (prior to 1910)	14,752 46
Expenditures for land from Lincoln's Wharf in 1887	5,562 52
Expenditures for land from Battery Wharf in 1893	10,000 00
Total expenditures on capital account	\$2,101,385 50
Expenditures for repairs of all kinds	1,325,397 59
Expenditures for fuel	1,906,282 33
Expenditures for salaries and wages	6,705,138 39
Expenditures for all other purposes	2,047,330 37
	<u>\$14,085,534 18</u>

Total Receipts From Ferries Since 1858-59.

Receipts from rents, etc., previous to purchase of ferries	\$29,588 56
Receipts from ferry tolls since purchase of ferries	7,176,836 47
Receipts from rents since purchase of ferries . .	67,339 75
Receipts from sale of ferryboats	149,067 44
Receipts from all other sources, per ferry books, Receipts from all other sources, additional, per auditor	26,368 61
	30,734 85
Total receipts from all sources	\$7,479,935 68
Less amount with tollmen as capital	200 00
Total receipts, per auditor's figures	<u>\$7,479,735 68</u>

**REGULAR ANNUAL (ORDINARY) AND SPECIAL APPROPRIATIONS
(EXTRAORDINARY) OF THE FERRY SERVICE FOR THE YEAR
ENDING JANUARY 31, 1919.**

Appropriation (regular) for the year ending January 31, 1918	\$388,619 50
Received by transfer from Bridge Service (net), . .	7,488 60
	<u>\$396,108 10</u>

PUBLIC WORKS DEPARTMENT.

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Amount of expenditures (regular) for the year, \$393,783 69
 Balance to City Treasury 2,324 41

\$396,108 10

SPECIAL APPROPRIATIONS.

Appropriation for ferryboats, repairs, etc. (from taxes), April 10, 1918 \$95,000 00

Amount expended from April 10, 1918, to January 31, 1919 67,719 33

Balance January 31, 1919 \$27,280 67

STATEMENT SHOWING RECEIPTS AT EACH FERRY.

North Ferry.

FROM TOLLMEN.	Foot Passengers.	From Tickets.	Totals.
Boston side.....	\$11,846 26	\$4,395 50	\$16,241 76
East Boston side.....	11,015 72	6,313 00	17,328 72
	\$22,861 98	\$10,708 50	\$33,570 48

From tollmen \$33,570 48

From gatemen:

For 81,892 foot passengers at 1 cent \$818 92
 For cash fares for teams 13,437 45
 14,256 37

Total at North Ferry \$47,826 85

South Ferry.

FROM TOLLMEN.	Foot Passengers.	From Tickets.	Totals.
Boston side.....	\$7,662 03	\$4,871 50	\$12,533 53
East Boston side.....	7,024 29	3,945 00	10,969 29
	\$14,686 32	\$8,816 50	\$23,502 82

From tollmen	\$23,502 82
From gatemen:	
For 69,567 foot passengers at 1 cent	\$695 67
For cash fares for teams	10,786 54
	<u>11,482 21</u>
 Total at South Ferry	 <u>\$34,985 03</u>
 North and South Ferries as above	 \$82,811 88
Tickets paid for at ferry office	4,134 80
Received in lieu of free ferries July 4, 1916	1 00
	<u></u>
 Total from rates	 \$86,947 68
Rents for the year	533 83
Sale of old material	290 50
Headhouse privileges	400 00
Commissions on public telephones	103 89
Care of public telephone booths	48 00
	<u></u>
 Total receipts for the year	 <u>\$88,323 90</u>

STATEMENT OF TRAVEL ON THE FERRIES FROM FEBRUARY 1,
1918, TO JANUARY 31, 1919, INCLUSIVE.

	North Ferry.	South Ferry.
Foot passengers at 1 cent each	2,368,090	1,538,199
Foot passengers by ticket	34,283	12,101
Foot passengers free	1,531	1,289
	<u>2,403,904</u>	<u>1,551,589</u>
 One-horse teams and pleasure carriages	 244,482	 188,935
One-seat automobiles	34,041	32,735
Two-horse teams	80,596	40,039
Motor trucks	105,027	81,010
Three-horse teams	1,200	2,271
Four-horse teams	3,084	4,514
Two-horse pleasure carriages and hacks	4,490	1,114
Two-seat automobiles	79,320	47,819
Handcarts, etc.	1,735	1,530
Drag wheels	7	1
Free teams	12,614	9,094
	<u>566,596</u>	<u>409,062</u>

PUBLIC WORKS DEPARTMENT.

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Total paying foot	3,952,673
Total free foot passengers	2,820
Total foot passengers carried	<u>3,955,493</u>
Total paying teams	953,950
Total free teams	21,708
Total teams carried	<u>975,658</u>

TOTAL TRAVEL ON BOTH FERRIES FROM FEBRUARY 1, 1913, TO
JANUARY 31, 1919.

	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
One-horse teams *.....	651,741	623,508	644,311	582,819	577,507	500,193
Two-horse teams †.....	239,121	248,464	276,850	291,795	308,564	306,672
Three-horse teams.....	7,732	6,125	5,410	4,723	3,538	3,471
Four-horse teams.....	4,578	4,739	4,507	6,640	7,089	7,598
Two-horse carriages, hacks ‡....	63,860	83,253	84,389	94,333	110,203	132,743
Two-cent tolls, hand carts, etc..	2,662	2,231	3,195	3,537	3,570	3,265
Dragwheels, etc.....	1	4	4	1	.....	8
Paid teams at both ferries.....	960,655	968,324	1,018,666	983,848	1,010,471	953,950
Free teams at both ferries.....	12,954	11,028	10,844	12,067	15,177	21,708
Total teams at both ferries,	982,609	979,352	1,029,510	995,915	1,025,648	975,658
Foot passengers paid.....	6,044,507	6,024,082	5,676,118	4,631,244	4,191,410	3,952,673
Foot passengers free.....	2,509	885	2,053	1,763	846	2,820
Total foot passengers.....	6,047,016	6,024,967	5,678,171	4,633,007	4,192,256	3,955,493

NOTE.—The above team travel includes automobiles.

* Includes one-seat automobiles. † Includes motor trucks. ‡ Includes two-seat automobiles.

APPENDIX C.

REPORT OF THE DIVISION ENGINEER OF THE HIGHWAY DIVISION.

BOSTON, February 1, 1919.

MR. THOMAS F. SULLIVAN,
Commissioner of Public Works:

DEAR SIR,— I submit herewith a statement of the activities, operations and expenditures of the Paving and Lighting Services for the year ending January 31, 1919.

The maintenance expenditures of the Highway Division for the year were as follows:

Lighting Service	<u>\$540,350 56</u>
Paving Service	<u>\$1,093,630 65</u>

NOTE.— For further detail of expenses see pages following.

PAVING SERVICE.

In common with all other municipalities, Boston was handicapped to a very great extent in street construction during the past year. Government restriction, shortage of labor and materials and other causes due to the war, compelled this city to adopt a war-time program and all work was confined to main thoroughfares. Nevertheless, the amount of work done compares very favorably with previous years, there being about 112,000 square yards of granite block paving with cement grout joints laid by contract. This is about 35 per cent more than was laid in 1917, and about twice as much as was laid during the combined years of 1914, 1915 and 1916. The department forces in addition laid about 25,010 yards of this form of pavement.

Two new asphalt plants have been erected during this year, one in the Dorchester district and the other in the Brighton district. In the Dorchester district about 8,000 yards of 2-inch Topeka pavement has been laid by the department forces and this work will be continued throughout the city during the coming year.

An innovation this year was the organizing of an artificial stone sidewalk repair gang in each district. The advantages of such an organization are many.

About 55,000 yards of new artificial stone sidewalk were laid this year by contract.

The principal streets paved this year with granite block on a concrete base are: Albany street, from Kneeland street to the Boston & Albany Railroad Bridge; Clinton street, Congress street, from Atlantic avenue to Fort Point channel; Cross street, from Commercial street to Haymarket square; Dartmouth street, from Tremont street to Stuart street; Harrison avenue, from Kneeland street to Dover street; Mercantile street, from South Market street to Richmond street; Somerset street, from Beacon street to Ashburton place; Sudbury street, from Court street to Merrimac street, and State street, from Broad street to Atlantic avenue. Atlantic avenue, from Summer street to Commercial street, is being repaved and will be completed early in the coming year.

Broadway, from Washington street to the Boston & Albany Railroad Bridge; Dorchester avenue, from Freeport street to Park street, and Overland street, from Brookline avenue to the Boston & Albany Railroad were paved with recut granite blocks on a concrete base.

About 25,000 yards of asphalt pavement on a concrete base was laid in Beacon street, Harvard street, Charlestown, Park Vale avenue, Saratoga street, South street and Brookline avenue.

About 33,500 yards of bitulithic pavement on a concrete base was laid in Carmel street, Norfolk street and North Beacon street.

Arlington street, from Boylston street to south of Providence street, was paved with brick block on a concrete base and Park street, from Tremont street to Beacon street, with the exception of a small area of granite blocks at Beacon street, was paved with filter-tine on a concrete base.

The following contracts are unfinished and work will be resumed on them as soon as weather conditions permit:

Bowdoin street, from 78 feet west of Mt. Ida road to Topliff street.

Pontiac street, from Tremont street to Hillside street.

Grove street, from Centre street to Washington street.

Washington street, from Forest Hills to Archdale road.

North Beacon street, from Cambridge street to Market street.

Atlantic avenue, from Broad street to South Market street.

Atlantic avenue, from South Market street to Commercial street.

Saratoga street, from Chelsea street to Bennington street.

Commercial street and Causeway street, from Hanover street.

Atlantic avenue, from Summer street to Broad street.

Dorchester avenue, from Rawson street to Savin Hill avenue.

Tremont street, from Castle street to Dover street.

Tremont street, from Common street to Castle street.

GENERAL PLANT.

The buildings in the several yards need extensive repairs and provision will be made in the incoming budget to care for some of this work.

One new Buffalo-Pitts steam road roller was purchased during the year. It has the new scarifying attachment and is more efficient than the old style roller. The live stock of the division suffered a loss of seven in January, by the disaster at the molasses tank in the North End district. No new horses have been bought, the seven lost having been replaced by horses transferred from other departments.

LIGHTING SERVICE.

The following is a statement of the work done during the year under the supervision of the Division Engineer, Highway Division:

Arc lamps have been provided for skating and tobogganing during the season at Franklin Field, Franklin Park and Wood Island Park, the same as in years past.

Arc lamps, magnetite type, have been installed on Commonwealth avenue, city proper; North Beacon street and Rogers Park, Brighton; Blue Hill avenue and

Ericsson street, Dorchester; Andrew square, South Boston, and Queensberry street, city proper.

The usual amount of regulation and relocation of lamps and services, made necessary by street construction, the building of sewers and other works, has been conducted throughout the year.

Petitions and requests for new lamps received from citizens and from officials, also complaints in relation to the Lighting Service, have been investigated and attended to. All streets in the underground district prescribed for the year have been inspected and necessary changes and additions have been made.

The number of miles of streets and ways lighted by this service is as follows:

Public streets and alleys	601.12
Public footways	1.34
Park roads, footways and private streets and alleys approximately	300.00
	<hr/>
	<u>902.46</u>

During the year the following defects were reported by the police: Arc lamps, 2,093; incandescent, 4,478, and gas lamps 19,754.

There are in operation 19,734 arc incandescents and gas lamps, divided as follows: 5,280 arcs, 4,596 tungsten incandescents, 9,717 single mantle gas lamps and 144 fire alarm gas lamps.

Yours respectfully,

JAMES H. SULLIVAN,
Division Engineer.

HIGHWAY DIVISION — LIGHTING SERVICE.

FINANCIAL STATEMENT.

*Expenditures, February 1, 1918, to January 31, 1919.**Electric Lighting:**Arc.*

Edison Electric Illuminating Company	\$382,740 66	
Charlestown Gas and Electric Company	23,218 80	
	<hr/>	
	\$405,959 46	
Rebates deducted in accordance with finding of Board of Gas and Electric Light Commissioners:		
Edison Electric Illuminating Company	\$121,395 65	
Charlestown Gas and Electric Company	7,582 01	
	<hr/>	
	128,977 66	
	<hr/>	\$276,981 80

Incandescent.

Edison Electric Illuminating Company	\$83,041 28	
Charlestown Gas and Electric Company	20 99	
	<hr/>	
	\$83,062 27	
Rebates deducted in accordance with finding of Board of Gas and Electric Light Commissioners:		
Edison Electric Illuminating Company	26,350 60	
	<hr/>	
		56,711 67
<i>Gas Lighting:</i>		
Boston Consolidated Gas Company	\$176,164 18	
	<hr/>	
Carried forward	\$176,164 18	\$333,693 47

<i>Brought forward</i>	\$176,164 18	\$333,693 47
Charlestown Gas and Electric Company	10,303 36	
Charlestown Gas and Electric Company fire alarm lamps	398 98	
	<hr/>	186,866 52
<i>Salaries and Wages:</i>		
Division Engineer (part of)	\$1,250 00	
Clerk	1,560 80	
Stenographer	1,029 48	
Lighting inspectors	2,252 34	
Pensions	360 00	
	<hr/>	6,452 62
<i>Automobile Expense:</i>		
Storage	\$60 00	
Registration	20 00	
Gasolene, oil, etc.	62 50	
Shoes and tubes, new and repairs,	111 78	
Supplies	23 75	
Repairs	21 26	
	<hr/>	299 29
<i>Construction:</i>		
Changes on account of installation of lamps, posts and removing and relocating lamps, posts, etc.		6,864 13
<i>Installing "Boulevard" Lamps and Posts:</i>		
Tremont street, from Boylston street to Common street, nine lamp-posts	\$825 63	
Hanover street, from Court street to Commercial street, thirty-four lamp-posts	1,963 94	
Maverick square, Central square and Meridian street, from Maverick square to Condor street, forty-six lamp-posts	3,173 21	
	<hr/>	5,962 78
<i>Office Expense:</i>		
Printing	\$39 34	
Postage	31 00	
Stationery and periodicals	56 92	
Atlas	37 50	
	<hr/>	164 76
<i>Carried forward</i>		\$540,303 57

<i>Brought forward</i>	\$540,303 57
<i>Miscellaneous:</i>	
Travel expense (car fares)	\$24 95
Teaming lamp-posts	10 04
Typewriter inspection	12 00
	<hr/> 46 99
Total	<u><u>\$540,350 56</u></u>

Revenue Credited to General Revenue.

Lighting Boston and Cambridge bridges	\$2,261 64
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The following is a statement of the work done during the year under the supervision of the Division Engineer, Highway Division:

Arc lamps have been provided for skating and tobogganing during the season at Franklin Field, Franklin Park and Wood Island Park, the same as in years past.

Arc lamps, magnetite type, have been installed on Commonwealth avenue, city proper; North Beacon street and Rogers park, Brighton; Blue Hill avenue and Ericsson street, Dorchester; Andrew square, South Boston, and Queensberry street, city proper.

The usual amount of regulation and relocation of lamps and services, made necessary by street construction, the building of sewers and other works, has been conducted throughout the year.

Petitions and requests for new lamps received from citizens and from officials, also complaints in relation to the Lighting Service, have been investigated and attended to. All streets in the underground district prescribed for the year have been inspected and necessary changes and additions have been made.

The number of miles of streets and ways lighted by this service is as follows:

Public streets and alleys	601.12
Public footways	1.34
Park roads, footways and private streets and alleys, approximately	300.00
	<hr/> 902.46

During the year the following defects were reported by the police: Arc lamps, 2,093; incandescent, 4,478, and gas lamps, 19,754.

There are in operation 19,734 arc incandescents and gas lamps, divided as follows: 5,280 arcs, 4,596 tungsten incandescents, 9,717 single mantle gas lamps and 144 fire alarm gas lamps.

LAMPS INSTALLED.

Magnetite arc lamps	.	.	.	.	.	101	
Tungsten lamps	.	.	.	.	.	26	
Single mantle gas lamps	.	.	.	.	.	78	
Fire alarm gas lamps	.	.	.	.	.	0	
						—	205

LAMPS DISCONTINUED.

Magnetite arc lamps	.	.	.	.	.	2	
Flame arc lamps	.	.	.	.	.	* 22	
Tungsten lamps	.	.	.	.	.	2	
Single mantle gas lamps	.	.	.	.	.	38	
Double mantle gas lamps	.	.	.	.	.	† 70	
Fire alarm gas lamps	.	.	.	.	.	0	
						—	134
Net increase	.	.	.	.	.	.	<u>71</u>

* Added to magnetite.

† Double mantle gas lamps.

The following table shows the work of setting, repairing and altering lamp-posts, brackets, services, etc.

	Set for Lamps.	Set in Place of Broken Posts.	Shifted to New Location.	Straight- ened.	Reset to Line and Grade.	Unused Posts Removed.	Repaired.	Laid.	Relaid.	Recon- nected.	Cleared.	Set in Place of Brackets.	Shades.
Gas posts.....	8	65	9	5	24	105	2	.....	.....	.....	.....	8	8
Aro posts.....	1	18	1	24	2	.....	.....	.....	.....	.....	12	7
Tungsten posts.....	1	1	10	.....	.....	.....	.....	.....	.....	.....	1
Gas brackets.....	9	7	.....	.....	.....	.....	.....	.....
Aro fixtures.....
Tungsten fixtures.....
Services.....	4	.....	8	.....	106	.....	.....

The following table shows the number of lamps of various types in use on January 1, 1919, as compared with the number in use on January 1, 1918:

	January, 1919.	January, 1918.	Increase or Decrease.
Single mantle gas.....	9,717	9,677	40
Double mantle.....		70	—70
Fire alarm gas.....	144	144	
Magnetite arc.....	5,280	5,181	99
Flame arc.....		22	—22
Tungsten incandescent.....	4,596	4,572	24
	19,737	19,666	71

STREET LAMP OUTAGES.

Rebates for lamps not lighted on schedule time or out before the proper time have been received on the various monthly bills as follows:

DATE.	Incandescent.	Gas.	Arc.
February, 1918.....	\$13 80	\$2,583 30	\$168 76
March.....	7 65	1,906 40	151 28
April.....	11 52	343 31	112 53
May.....	7 22	38 28	93 46
June.....	6 56	82 37	47 00
July.....	6 99	20 15	61 44
August.....	9 37	16 37	58 11
September.....	10 09	12 25	103 71
October.....	5 51	4 64	127 02
November.....	4 05	2 54	167 36
December.....	6 98	15 70	104 34
January, 1919.....	13 26	42 62	113 24
	\$103 00	\$5,067 93	\$1,308 25

GAS LIGHTING.

There are 9,717 single mantle gas lamps and 144 open flame fire alarm signal lamps.

The city furnishes the lamp-posts and provides service pipes laid from the gas mains to the top of the posts; maintain all such pipes and posts in good condition and repair; furnish gas, lanterns, burners and all other necessary equipment, including labor for lighting and care.

The Lighting Service provides for the gas, lighting and care of the fire alarm signal lamps, and the Fire Department for the lanterns, posts, setting and repairing of same.

Gas Lamps.

LIGHTING CONTRACT.	Gas District.	Number of Lamps.	Type of Lamps.	Rated Candle Power.	Gas Consumed per Lamp per Hour.	Hours of Burning per Annum.	Cost of Gas per Lamp per Annum.	Cost per Lamp for Lighting, Care and Repair per Annum.	Total Cost per Lamp.
Boston Consolidated Gas Company. Charlestown Gas and Electric Company.	South Boston, East Boston, Dorchester, Roxbury, West Roxbury, Brighton, Charlestown.....	9,208	Single mantle.	60	3 feet.	4,000	\$9 00	\$12 00	\$21 00
		125	Open flame.	.....	4 feet.	4,000	.....	.....	21 00
		506	Single mantle	60	3 feet.	4,000	9 00	12 00	21 00
		19	Open flame.	.....	4 feet.	4,000	.....	.....	21 00

ELECTRIC LIGHTING.

There are in use 5,280 magnetite arc lamps, 3,288 40 candle power, 1,288 60 candle power, 12 100 candle power and 8,500 candle power tungsten lamps.

The electric companies provide and set the lamp-posts, except the lamp-posts for incandescent lamps supplied from underground circuits, furnish lamps, overhead wires, underground conduits, cables and connections and all other necessary equipment and maintain them in good condition and repair.

The lighting rates for electric lamps are in accordance with the following table:

DESCRIPTION OF LAMP.	Fixed Costs per Lamp. per Year.	Running Costs per Lamp Hour.
40 candle power incandescent lamp, series.....	\$10 80	$\frac{11}{16}$ cent
40 candle power incandescent lamp, multiple.....		$\frac{11}{16}$ cent
60 candle power incandescent lamp, series.....	12 00	$\frac{1}{4}$ cent
60 candle power incandescent lamp, multiple.....		$\frac{1}{4}$ cent
100 candle power incandescent lamp, series.....	18 00	$\frac{1}{4}$ cent
100 candle power incandescent lamp, multiple.....		$\frac{1}{4}$ cent
500 candle power incandescent lamp, multiple.....	36 00	1 $\frac{1}{4}$ cents

A discount of 10 per cent is made on the above rates for lamps in all sections of the city. A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is made for outages.

NOTE.— Nine 80 candle power reduced to 60 candle power.

Two 80 candle power increased to 100 candle power.

Six 320 candle power changed to 500 candle power.

Arc Lamps.

COMPANY.	Number of Lamps	Connected	Type of Lamp.	Type of Circuit.	At Terminal.	Lighting Hours.	Cost per Lamp per Annum.
Edison Electric Illuminating Company.....	2,033	Overhead.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	\$79 60
	2,924	Underground.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	79 60
	28	Underground.	Magnetite.	Multiple D. C.	.....	3,828	87 52
Charlestown Gas and Electric Company.....	219	Overhead.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	79 60
	5,280						

NOTE.— In the above the candle power figures are the official designations. The wattage figures are here eliminated.

Incandescent Lamps.

COMPANY.	Number of Lamps.	Type of Lamp.	Type of Circuit.	Candle Power.	Lighting Hours.	Cost of Lamp per Annum.
Edison Electric Illuminating Company.....	1,843	Tungsten.	Series 6.6 amp. D. C.	40	3,828	\$15 92
	783	Tungsten.	Series 6.6 amp. D. C.	60	3,828	17 60
	3	Tungsten.	Series 6.6 amp. D. C.	100	3,828	29 98
	1,445	Tungsten.	Multiple D. C.	40	3,828	18 33
	504	Tungsten.	Multiple D. C.	60	3,828	21 14
Charlestown Gas and Electric Company.....	9	Tungsten.	Multiple D. C.	100	3,828	33 43
	8	Tungsten.	Multiple D. C.	500	3,828	84 08
	1	Tungsten.	Multiple D. C.	60	3,828	21 14

NOTE.— In the above the candle power figures are the official designations. The wattage figures are here eliminated.

PAVING SERVICE.

The following is a description of the most important work done during the year:

GRANITE BLOCK PAVEMENT.

Albany street, from Dover street to Northampton street, is about 4,860 feet in length. A contract for paving this street with special granite block, on a 6-inch Portland cement concrete base, with grout joints, was awarded to Bernard E. Grant August 26, 1916. It is an 80-foot street with a roadway 54 to 60 feet in width. The roadway between Stoughton and Northampton streets was paved with wood blocks on a 6-inch Portland cement concrete base. The contractor set the edgestone and paved the roadway. The sidewalk on the easterly side was paved with brick and on the westerly side, from Dover street to Stoughton street, artificial stone sidewalks were laid. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. Work was begun August 29, 1916, and suspended January 21, 1918. In the spring of 1918 this contract was canceled with Bernard E. Grant and the city forces were ordered to complete the work. The city forces completed the wood block pavement, paved the intersection at Massachusetts avenue with special cut granite blocks, grout joints, on a 6-inch Portland cement concrete base, and relaid the brick sidewalks. The former surface of the street was granite block on a gravel base, with the exception of the part near Stoughton street and Massachusetts avenue, which was asphalt and bitulithic pavement.

Albany street, from Kneeland street to the Boston & Albany Railroad Bridge, is about 1,275 feet in length. A contract for paving this street with special cut granite blocks, grout joints, on a 6-inch Portland cement concrete base, was awarded to Coleman Brothers, July 13, 1918. It is a 56-foot street with a roadway 34 to 35 feet in width and sidewalks 8 to 10 feet in width. The contractor set the edgestone and paved the roadway. In front of the freight houses the sidewalks were omitted and the space paved the same as the roadway. The sidewalk on the easterly side was paved with brick and on the westerly side artificial stone sidewalks were laid. In connection with this contract work was done on Harvard, Oak and Curve streets. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the

city and delivered on the line of the work. All other material was furnished by the contractor. The granite block roadway pavement and the artificial stone sidewalks were laid under a five-year guaranty. The former surface of the street was granite blocks, gravel joints, on a gravel base.

Atlantic avenue, from Kneeland street to Summer street, is about 1,182 feet in length. A contract for paving this street with special cut granite blocks, grout joints, was awarded to Coleman Brothers July 30, 1918. This street is 100 to 120 feet in width with a roadway of 70 to 85 feet in width and sidewalks of 15 to 25 feet in width. The contractor set the edgestone and paved the roadway. The brick sidewalks were relaid where directed and on the westerly side artificial stone sidewalks were laid. In connection with this contract work was done on Essex, East, Beach and Kneeland streets. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the city on the line of work. All other material was furnished by the contractor. The tracks of the Boston Elevated Railway Company and the Union Freight Company were set to grade and the space between the tracks was paved with special cut granite paving blocks, grout joints, on a 6-inch Portland cement concrete base. The roadway pavement and the artificial stone sidewalks were laid under a five-year guaranty. The former surface of the street was granite blocks, pitch joints, on a 6-inch Portland cement concrete base.

Atlantic avenue, from Summer street to Broad street, is about 2,011 feet in length. A contract for repaving this street with special cut granite paving blocks, grout joints, on a concrete base, was awarded to Bernard E. Grant, September 17, 1918. The street is 100 feet in width, with a roadway 76 feet in width and sidewalks 12 feet in width. By order of the Commissioner of Public Works the laying of the special cut blocks was omitted and the contractor was ordered to relay the old blocks. Work was begun October 16, 1918. The old concrete base was cleaned and built up to the proper grade with new concrete, the old blocks were cleaned, culled and relaid with grout joints. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the city on the line of work. All other material was furnished by the contractor. The tracks of the Union Freight Company were set to grade and the space between the tracks was paved with old granite blocks, grout joints, on a 6-inch concrete base. The north roadway has been completed from Summer street to about 90 feet west of Oliver street. Artificial stone sidewalks were laid on the north side from Summer street to Oliver street and for 265 feet between Oliver street and Broad street. Work on this contract was suspended December 14, 1918, and work will be resumed

in the spring of 1919. The former surface of this street was granite blocks, pitch joints, on a 6-inch concrete base.

Atlantic avenue, from Broad street to South Market street, is about 1,281 feet in length. A contract to repave the surface of this street with special cut granite paving blocks, grout joints, on a 6-inch concrete base, was awarded to Rossetti & Co., September 6, 1918. The contractor hauled the old blocks to the city lot on Massachusetts avenue, did the subgrading and reset the edgestone. The tracks of the Boston Elevated Railway and Union Freight Company were set to grade and the entire roadway was repaved with special cut granite paving blocks, grout joints, on a 6-inch concrete base. The city furnished the edgestone required and all other materials were furnished by the contractor. Work was suspended January 17, 1919. Artificial stone sidewalks were laid on the westerly side of the street, and will also be laid on the easterly side in the spring of 1919.

Atlantic avenue, from South Market street to Commercial street, is about 1,335 feet in length. A contract to repave the surface of this street with special cut granite paving blocks, grout joints, on a 6-inch concrete base, was awarded to D'Onfro Brothers, September 13, 1918. Work was suspended December 24, 1918. The contractor hauled the old paving blocks to the city lot on Massachusetts avenue, did the subgrading and reset the edgestone. The tracks of the Boston Elevated Railway and the Union Freight Company are being set to grade and the roadway is being repaved with new special cut granite paving blocks, grout joints, on a 6-inch concrete base. Artificial stone sidewalks are to be laid in 1919. The contractor was not able to finish the work this year due to the delay in relaying the car tracks. The work will be resumed early in the spring of 1919. The city is furnishing all the edgestone required and all other materials are being furnished by the contractor. The former surface was granite block.

Broadway, from Washington street to Boston & Albany Railroad Bridge, is about 587 feet in length. A contract for paving this street with special cut granite paving blocks, grout joints, on a 6-inch concrete base, was awarded to James Doherty July 30, 1918. It is a 60-foot street with a 40-foot roadway and sidewalks 10 feet in width. By order of the Commissioner of Public Works the laying of the special cut blocks was omitted and the contractor ordered to haul and lay recut paving blocks. The tracks of the Boston Elevated Railway were set to grade. The contractor set the edgestone and repaved the roadway with recut paving blocks, grout joints, on a 6-inch concrete base. On the north side, between Washington street and Harrison avenue, a part of the brick sidewalk was relaid and artificial stone sidewalks were laid on the remaining portion of the street. A wooden fence was built on the retaining wall adjoining the

Boston and Albany Railroad property. The straight edgestone, corners, recut blocks and flagging were furnished by the city and hauled by the contractor. All other material was furnished by the contractor, with the exception of the sidewalk bricks and circular edgestone which were furnished by the city on the line of work. The roadway pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty. The former surface of the street was granite block, gravel joints, on a gravel base.

Charles street (westerly side), from Boylston street to Beacon street, is about 1,313 feet long. A contract to construct a parking place for automobiles on the west side of this street was awarded to James Doherty December 3, 1918. The westerly sidewalk on this street was 17 feet wide, and it was decided to cut this back to an 8-foot walk and pave the 9 feet taken off for the parking place. The contractor reset the edgestone to the new line, did the subgrading, furnished and laid a 4-inch concrete base and paved the space with recut granite paving blocks, grout joints. The brick sidewalk was relaid where necessary. The city furnished the necessary edgestones and recut blocks at the city lot on Massachusetts avenue. The contractor furnished all other materials.

Clinton street, from Merchants row across Commercial street, is about 608 feet in length. A contract to repave the surface of this street was awarded to Coleman Brothers June 21, 1918. The contractor hauled the old granite paving blocks to the city lot on Massachusetts avenue, reset the edgestone, did the subgrading and paved the street with special new granite paving blocks on a 6-inch concrete base, grout joints. He also furnished and laid the artificial stone sidewalks. The city furnished the edgestones required and the contractor furnished all other materials.

Commercial street, from Hanover street to Prince street, is about 1,665 feet in length, and **Causeway street**, from Prince street to westerly side of Washington Street North, is about 248 feet in length. A contract to repave the surface of these streets with special cut, new granite paving blocks was awarded to Bernard E. Grant September 13, 1918. An order was issued by the Commissioner of Public Works to omit the furnishing of the special new blocks and to substitute the relaying of the existing blocks with grout joints. The contractor barred up and cleaned the old blocks and repaired the old concrete base. A new concrete base was laid where necessary. The Boston Elevated Railway and the Union Freight Company relaid their tracks and the street is being relaid. Artificial stone sidewalks are being furnished and laid. Work was begun September 13, 1918, and suspended January 2, 1919. The work will be started again in the spring of 1919. The city furnished the edgestone on the line of work and

any paving blocks that may be required will be furnished at the city lot on Massachusetts avenue. All other materials are furnished by the contractor.

Congress street, from Atlantic avenue to Fort Point channel, is about 603 feet in length and **Dorchester avenue**, from Congress street to Summer street, is about 321 feet in length. A contract to repave these streets was awarded to John E. Quinn July 23, 1918. The contractor removed the old blocks, did the subgrading, reset the edgestone and paved the street with special cut new paving blocks on a 6-inch concrete base, grout joints. The contractor furnished all materials with the exception of the edgestone which was furnished by the city on the line of work. The street pavement and the artificial stone sidewalks were laid under a five-year maintenance guaranty.

Cross street, from Commercial street to Haymarket square, is about 1,406 feet in length. A contract to repave this street was awarded to Coleman Brothers June 21, 1918. The contractor hauled the old granite blocks to the city lot on Massachusetts avenue, reset the edgestone, did the subgrading and paved the street with special cut new granite paving blocks on a 6-inch concrete base, grout joints. On account of the heavy traffic the section between North street and Hanover street was widened; one foot being taken from the sidewalks on each side and put into the paved roadway, making the roadway 2 feet wider than it was. The contractor relaid some of the brick sidewalks and furnished and laid artificial stone sidewalks in certain parts of the street. The city furnished the new edgestone required on the line of work and the contractor furnished all other materials. The artificial stone sidewalks and the granite block paving were laid under a five-year maintenance guaranty.

Dartmouth street, from Tremont street to Stuart street, is about 1,752 feet in length. A contract for paving this street was awarded to James Doherty June 21, 1918. It is a 60-foot street with a roadway 40 feet in width and sidewalks 10 feet in width. The contractor set the edgestone and paved the roadway with special cut new granite paving blocks on a 6-inch concrete base, grout joints. By order of the Commissioner of Public Works part of the roadway was repaved with recut blocks on a 6-inch concrete base, grout joints. The tracks of the Boston Elevated Railway were set to grade and the space between the rails paved with special cut blocks. In connection with this contract, work was done on Tremont and Buckingham streets. Artificial stone sidewalks were also constructed. The roadway pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty. The former surface of this street was granite block, gravel joints, on a gravel base.

Dorchester avenue, from Freeport street to Park street, is

about 3,352 feet in length. A contract for paving this street with recut blocks was awarded to Bernard E. Grant August 29, 1917. This is a 60-foot street with a 40-foot roadway and sidewalks 10 feet in width. The contractor did the excavating and recut the old granite blocks. Blocks necessary to complete the work were recut at the Massachusetts avenue lot and hauled by the contractor. All other materials were furnished by the contractor. The westerly side was paved with recut granite blocks, grout joints, on a 6-inch concrete base from Freeport street to the railroad bridge. Work was suspended December 17, 1917. By order of the Commissioner of Public Works this contract was canceled with Bernard E. Grant and a new contract awarded to James Doherty June 21, 1918. The contractor did the excavating and completed the paving with recut granite blocks, grout joints, on a 6-inch concrete base. All materials with the exception of the recut blocks were furnished by the contractor. Part of the Boston Elevated Railway tracks were set to grade and the spaces between the rails were paved with recut blocks. In connection with this contract, work was done on Park street and Dorchester avenue. The pavement was laid under a five-year maintenance guaranty. The former surface of this street was granite blocks, gravel joints, on a gravel base.

Dorchester avenue, from Savin Hill avenue to Freeport street, is about 1,940 feet in length. A contract for paving this street with granite blocks on a 6-inch concrete base was awarded to Bernard E. Grant August 26, 1916. It is a 60-foot street with 10-foot sidewalks. Under the contract it was the intention to relay the existing granite blocks, but owing to the shallow rail of the Boston Elevated Railway Company this was found to be unpracticable, and the contractor was ordered to recut the blocks so that they would be the proper depth. The straight edgestone and corners were furnished by the city and hauled by the contractor; the circular edgestone was furnished by the city on the line of work and all other materials were furnished by the contractor. The contractor did the excavating, reset the edgestone, recut the paving blocks and paved with the recut paving blocks on a 6-inch base, with grout joints. The dummy was paved with the shallows of the existing blocks on a 6-inch base, grout joints. The car tracks were set to grade and the space between the rails paved with special cut granite blocks on a concrete base, grout joints, by the Boston Elevated Railway Company, previous to this contract. Work on this street was started September 25, 1916, and suspended November 17, 1917. In the spring of 1918 this contract was canceled with Bernard E. Grant and the city forces were ordered to complete the work. The city forces paved a small area of the roadway with recut granite blocks, grout joints, on a 6-inch Portland cement concrete base, and relaid the brick sidewalks.

Work on this street was completed and the roadway pavement was laid under a five-year maintenance guaranty. The former surface of this street was granite block, gravel joints, on a gravel base.

Harrison avenue, from Kneeland street to Dover street, is about 2,661 feet in length. It is a 50-foot street with a 34-foot roadway and sidewalks 8 feet in width. A contract for paving this street with special cut granite blocks on a 6-inch Portland cement concrete base was awarded to Bernard E. Grant August 26, 1916. The contractor did the excavating, reset the edgestone and paved the roadway. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The car tracks were set to grade and the space between the rails paved with recut granite blocks on a 6-inch concrete base with grout joints. The roadway between Dover street and the railroad bridge was completed December 17, 1917. In the spring of 1918 this contract was canceled with Bernard E. Grant and a new contract was awarded to Coleman Brothers May 27, 1918. The contractor did the excavating, set the edgestone, removed the old blocks and paved the roadway between Harvard street and the railroad bridge with special cut granite blocks on a 6-inch Portland cement concrete base. The brick sidewalks were relaid between Broadway and Motte street and the rest of the sidewalks were constructed of artificial stone. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the city on the line of work. All other materials were furnished by the contractor. In connection with this contract, work was done on Harvard, Nassau and Oak streets and on Broadway. Work was completed June 26, 1918, and the roadway pavement and the artificial stone sidewalks were laid under a five-year maintenance guaranty. The former surface of this street was granite block pavement, grout joints, on a gravel base.

Mercantile street, from South Market street to Richmond street, is about 533 feet in length. A contract to repave this street was awarded to Coleman Brothers June 21, 1918. The contractor hauled the old granite blocks to the city lot on Massachusetts avenue, did the subgrading, reset the edgestone and paved the street with special cut new granite paving blocks on a 6-inch concrete base, grout joints. From Richmond street to Clinton street the brick sidewalks were relaid, and from Clinton street to South Market street artificial stone sidewalks were constructed. The city furnished the edgestone and sidewalk bricks and all other materials necessary were furnished by the contractor. The artificial stone sidewalks and new granite block paving were laid under a five-year maintenance guaranty.

Neponset avenue, from Ashmont street to Chickatawbut street, is about 1,708 feet in length. A contract for paving this roadway was awarded to John F. Lynch October 1, 1917. Work was begun October 2, 1917, and suspended December 14, 1917. Work was resumed March 19, 1918, and completed April 26, 1918. Under an extension of this contract the easterly side of this street was repaved to Minot street. The roadway is 44 feet wide with a double track for street cars in the center. It is paved with granite blocks, grout joints, on a gravel base. The granite paving blocks were furnished by the city and hauled by the contractor. The surplus paving blocks and flagging were hauled to the city yard on Codman street by the contractor. The granite block paving was laid on this street under a five-year maintenance guaranty.

Somerset street, from Beacon street to Ashburton place, is about 320 feet in length. A contract for paving this street with special cut granite blocks, grout joints, on a 6-inch Portland cement concrete base was awarded to Bernard E. Grant August 16, 1917. No work was done under this contract and by order of the Commissioner of Public Works the contract with Bernard E. Grant was canceled and a new contract was awarded to Warren Brothers Company June 21, 1918. This street has a roadway of 18 feet to 20 feet in width and sidewalks 6 feet to 8 feet in width. The contractor set the edgestone where directed, removed the old blocks, did the excavating and paved the roadway with special cut granite blocks, grout joints, on a 6-inch Portland cement concrete base. The brick sidewalks were replaced with artificial stone where directed. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the city on the line of work, all other materials necessary were furnished by the contractor. The roadway pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty. The former surface of this street was macadam with granite block gutters on a gravel base.

State street, from Broad street to India street, and from Commercial street to Atlantic avenue, is about 769 feet in length. A contract to repave this street was awarded to John E. Quinn August 22, 1918. The contractor removed the old blocks, did the subgrading, reset the edgestone and paved the street with new special cut granite blocks on a 6-inch concrete base with grout joints. Artificial stone sidewalks were also constructed. The city furnished the edgestone and all other materials were furnished by the contractor. The new granite block paving and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Sudbury street, from Court street to Merrimac street, is about 870 feet in length. A contract to pave this street was awarded to Simpson Brothers June 21, 1918. The contractor

hauled the old paving blocks to the city yard on Medford street, Charlestown, reset the edgestone, did the subgrading and paved the street with new special cut granite blocks on a 6-inch concrete base, grout joints. Artificial stone sidewalks were also constructed. The contractor did considerable repaving on the adjoining streets. The city furnished the edgestone and some second-hand paving blocks for paving the approaches to the street. All other material was furnished by the contractor. The new granite paving and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Tremont street, from Boylston street to Common street, is about 885 feet in length with a roadway 40 feet and sidewalks 10 feet in width. A contract for paving this street with wood block pavement was awarded to Bernard E. Grant. The contractor did the excavating, reset the edgestone, relaid the brick sidewalks, brought up the existing concrete base and paved the roadway with wood block, sand joints, on one (1) inch mortar bed. The intersection of Eliot street was paved with special cut granite blocks with pitch joints on a concrete base. The straight edgestone and corners were furnished by the city and hauled by the contractor. The sidewalk bricks were furnished by the city on the line of the work. All other materials were furnished by the contractor. The car tracks of the Boston Elevated Railway were set to grade and the space between the rails paved with wood blocks on a 6-inch concrete base, grout joints, by the railway company. Work on this contract by Bernard E. Grant was suspended November 30, 1917. By order of the Commissioner of Public Works this contract was canceled with Bernard E. Grant and a new contract to complete the artificial stone sidewalks was awarded to Warren Brothers Company June 21, 1918. Artificial stone sidewalks were laid where directed and the work was completed July 18, 1918. The wood block pavement, granite block pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Washington street, from Forest Hills to Archdale road, is about 2,745 feet in length. The contract for constructing the surface of this street was awarded to Simpson Brothers June 28, 1918. It is a 60-foot street with 8-foot sidewalks. Work was begun July 13, 1918, and suspended December 16, 1918. Edgestone has been set, artificial stone sidewalks constructed and the roadway paved with 5-inch granite blocks on a concrete base, grout joints, on the westerly side of the street. The artificial stone sidewalks and granite block pavement were laid under a five-year maintenance guaranty. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other material was furnished by the contractor. Work will be resumed early in the spring of 1919.

Washington street, from Court avenue to Beach street, is about 2,815 feet in length, with a roadway 27 to 40 feet in width and sidewalks 8 to 17 feet in width. A contract for paving this street with wood blocks was awarded to Bernard E. Grant August 16, 1917. The contractor removed the existing wood blocks, reset the edgestone, relaid the brick sidewalks where directed, cleaned the existing concrete base, paved the roadway with new wood blocks on a one (1) inch mortar bed, with sand joints. Where the existing wood blocks were found to be in good condition between the car tracks it was not disturbed. On portions of the street the space between the rails was paved with new wood blocks by the Boston Elevated Railway. All materials, including the wood blocks, were furnished by the contractor. The wood block pavement was laid under a five-year maintenance guaranty. Work was suspended on this street December 23, 1917, and at that time the work was accepted as completed. The former surface of this street was wood block pavement on a concrete base.

ASPHALT PAVEMENT.

Beacon street, from Raleigh street to the railroad bridge, is about 1,623 feet in length. A contract to pave the surface of this street was awarded to the Bermudez Company September 20, 1917. The street is paved with Mexican asphalt on a 6-inch Portland cement concrete base and has granite block gutters and brows to car tracks, also laid on a concrete base, grout joints. The contractor did the excavating and reset the edgestone. The work was started late in the fall of 1917 and it was necessary to shut down work on account of the severe weather. In the paving done this year the concrete base was omitted and the asphalt was laid on the old macadam as a foundation. The contractors furnished and laid the artificial stone sidewalks where they were not already constructed. The asphalt pavement and sidewalks were laid under a five-year maintenance guaranty. All materials were furnished by the contractor. An order was given extending this work on Brookline avenue to the northerly side of Newbury street.

Brighton avenue, from Commonwealth avenue to Cambridge street, is about 3,162 feet in length. A contract for constructing the surface of this street was awarded to the Bermudez Company September 29, 1917. Work was started September 21, 1917, and suspended December 8, 1917. Work was resumed June 10, 1918, and completed September 19, 1918. This street is 100 feet in width, consisting of two roadways, one 25 feet in width and one 30 feet wide, 10-foot sidewalks and a 25-foot reservation or loam space in the middle of the street. This year artificial stone sidewalks were constructed by the contractor. The city furnished all edgestone required, also the paving blocks. All other material was furnished by the con-

tractor. The asphalt pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Harvard street, Charlestown, from Prescott street to the south side of Harvard square, is about 445 feet in length. A contract to pave this street was awarded to the Bermudez Company September 20, 1917. The contractor reset the edgestone, did the subgrading, removed the old block gutters and prepared the old macadam surface as a foundation and on this surface laid $1\frac{1}{2}$ inches of asphalt wearing surface. They also furnished and laid the artificial stone sidewalks. The city furnished the edgestone required and the contractor furnished all other material. The asphalt pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Maverick square, from Sumner street to Maverick street, is about 510 feet in length. A contract to construct the surface of this street was awarded to the Bermudez Company September 20, 1917. This square consists of a 34-foot roadway and a 10-foot sidewalk on the easterly side of the East Boston Tunnel entrance and the roadway on the westerly side is 38 feet in width with a 10-foot sidewalk. Work was begun October 25, 1917, and suspended December 15, 1917. Work was resumed July 27, 1918, and completed August 9, 1918. The contractor did the subgrading, reset the edgestone, and paved the roadway with Mexican asphalt on a 6-inch concrete base, except the gutters and brows to the car tracks which are paved with granite blocks, grout joints, on a concrete base. This work was done in 1917. The artificial stone sidewalks were laid in 1918. The contractor furnished all material necessary to do the work. The former surface of this street was granite block paving.

North Russell street, from Cambridge street to Eaton street, is about 438 feet in length. A contract to construct this street was awarded to the Bermudez Company September 20, 1917. This street is 40 feet in width, with 7-foot sidewalks. The roadway was paved with Mexican asphalt under this contract in 1917. The work done this year consisted of laying artificial stone sidewalks. The roadway pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

South street, from Jamaica street to Arborway, is about 1,648 feet in length. A contract to construct the surface of this street was awarded to the Bermudez Company September 20, 1917. Work was begun August 26, 1918, and completed November 13, 1918. This street varies from 60 to 64 feet in width and the sidewalks are 10 feet wide. The space between the car tracks and in front of the car barn on the westerly side was repaved with the old granite blocks, grout joints, on a gravel base. The remainder of the westerly side and the entire easterly side was paved with sheet asphalt on the old macadam for a base. The edgestone was reset in part. A small amount of straight edgestone and North River flagging

was furnished by the city on the line of work. A few second-hand paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sheet asphalt pavement was laid under a five-year maintenance guaranty.

Saratoga street, from Chelsea street to Bennington street, is about 5,924 feet in length. A contract to pave this street with asphalt was awarded to the Bermudez Company September 13, 1918. The contractor did the excavating and subgrading, hauled the old granite paving blocks from the part of the street that was paved to the city yard on Eagle street, set the edgestone, laid the concrete base and paved with asphalt. The Boston Elevated Railway removed their abandoned car track so that the asphalt paving now extends from curb to curb. The work was started September 17, 1918, and suspended December 31, 1918, the contractor being compelled to shut down the work on account of the lateness of the season. Artificial stone sidewalks are to be laid in 1919. The city furnished the edgestone on the line of work and the contractor furnished all other materials. The original surface of this street was part macadam and part granite blocks.

BRICK BLOCK PAVEMENT.

Arlington street, from Boylston street across Providence street, is about 196 feet in length. A contract to pave this street with brick block was awarded to Coleman Brothers November 25, 1918. The contractor hauled the old granite blocks to the city lot on Massachusetts avenue, did the subgrading, furnished and laid a 6-inch concrete base, furnished the 1-inch cement sand bed and laid and grouted the brick blocks. The city furnished the brick blocks and the contractor furnished all other necessary material. The pavement was laid under a five-year maintenance guaranty.

FILBERTINE.

Park street, from Tremont street to Beacon street, is about 510 feet in length. A contract for paving this with Topeka and granite block pavement was awarded to Bernard E. Grant August 16, 1917. It has a roadway 29 to 48 feet in width and one sidewalk 12 to 15 feet in width. About 144 square yards of special cut granite blocks, with pitch joints, and 26 yards, with grout joints, on a 6-inch Portland cement base, were laid under this contract. Work was suspended October 21, 1917. By order of the Commissioner of Public Works the contract was canceled with Bernard E. Grant and a new contract was awarded to Warren Brothers Company June 21, 1918. The contractor set the edgestone where directed, removed the old blocks and did the excavating. At Tremont street the roadway was paved with special cut granite blocks, with grout

joints, on a 6-inch Portland cement concrete base. From the end of the grouted pavement to the bend the roadway was paved with filbertine on a macadam foundation, with second-hand granite block gutters, grout joints, on a 4-inch Portland cement concrete base. From the bend to the paving done by Grant in 1917 the roadway was paved with special cut granite blocks, pitch joints, on a 6-inch Portland cement concrete base. The brick sidewalks were replaced with artificial stone where directed. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk bricks were furnished by the city on the line of work. All the other material necessary was furnished by the contractor. The filbertine pavement, granite block pavement and the artificial stone sidewalks were laid under a five-year maintenance guaranty. The former surface of this street was macadam and granite block paving on gravel base, gravel joints.

TOPEKA PAVEMENT.

Washington street, from Talbot avenue to Armandine street, is about 2,035 feet in length. A contract to reconstruct the surface of this street from Talbot avenue to Ashmont street was awarded to Warren Brothers Company August 17, 1918, and afterwards extended to Armandine street. Work was begun August 12, 1918, and completed September 25, 1918. This street is from 60 to 70 feet in width, with a Topeka roadway on the existing macadam base, granite edgestone and a 10-foot artificial stone sidewalk. The street car tracks were paved with granite blocks, grout joints, by the Boston Elevated Railway. All the new material required was furnished by the contractor. The existing surplus paving material was hauled to the city yard by the contractor. The sidewalks and roadway were laid under a five-year maintenance guaranty.

ASSESSMENT STREETS.

The following streets have been constructed or are in the process of construction under the provisions of chapter 393 of the Acts of 1906 and acts in amendment or in addition thereto:

Alger street, from Dorchester avenue to New York, New Haven & Hartford Railroad, is about 549 feet in length. A contract for furnishing and placing filling in this street was awarded to Frank J. Hannon November 7, 1917. Work was started November 12, 1917, and completed June 12, 1918.

Bowdoin street, from 78 feet west of Mt. Ida road, across Topliff street, is about 1,156 feet in length. A contract for repaving the surface of this street with asphalt was awarded to the Bermudez Company September 20, 1917. Work was begun November 11, 1918, and suspended December 17, 1918. A part of the artificial stone sidewalks have been laid by the

contractor. The car tracks have been set to grade and the space between the rails has been paved by the Boston Elevated Railway.

Carmel street, from Tremont street to Delle avenue, is about 250 feet in length. A contract for constructing the surface of this street was awarded to Warren Brothers Company October 25, 1917. Work was begun April 8, 1918, and completed June 14, 1918. It is a 40-foot street with a 26-foot roadway paved with bitulithic on a 4-inch Portland cement concrete base, 30-inch grouted granite gutters, granite edgestone and 7-foot artificial stone sidewalks. The straight edgestone and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The contractor hauled the surplus paving material to the city yard. The bitulithic roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Cliffmont street, from Canterbury street to 1,120 feet southerly. A contract for constructing this street was awarded to Martino DeMatteo October 5, 1917. Work was begun November 26, 1917, and suspended December 11, 1917. Work was resumed April 22, 1918, and completed September 6, 1918. It is a 40-foot street with tar macadam roadway, granite edgestone and a 7-foot sidewalk on the westerly side (the edgestone and sidewalk were omitted on the easterly side), and a concrete retaining wall with a wooden fence about 270 feet in length at the southerly end of the street. The straight edgestone and corners were furnished by the city and hauled by the contractor. The tar binder was furnished by the city on the line of work. The artificial stone sidewalk was laid by the contractor under a five-year maintenance guaranty.

Conley street, from Old Colony Parkway to Tenean street, is about 473 feet in length. A contract for furnishing filling on this street was awarded to D. M. Biggs & Co. July 17, 1917. Work was begun July 23, 1917, and completed April 19, 1918. (See 1917 report for edgestone and grading by the city forces.)

Fuller street, from Commonwealth avenue to Brookline avenue, is about 146 feet in length. A contract to lay artificial stone sidewalks on this street was awarded to the Pignat-Vicenzi Mosaic Company July 23, 1918. This street as laid out is 50 feet in width, with 8-foot sidewalks. The city paving force set the edgestone, did the subgrading, paved the gutters and constructed a water-bound macadam roadway. The artificial stone sidewalks were laid under a five-year maintenance guaranty, work under the contract beginning August 24, 1918, and being completed August 27, 1918.

Goodale road, from Blue Hill avenue 630 feet northwesterly. A contract for constructing this roadway and sidewalk on the north side and a concrete retaining wall at the easterly side was awarded to William J. Rafferty & Co. July 11, 1918.

Work was begun July 9, 1918, and completed October 1, 1918. It is a 40-foot street with a macadam roadway, grouted granite block gutters, granite edgestone and 7-foot artificial stone sidewalks and a concrete retaining wall with an iron fence on the northerly side extending from Blue Hill avenue about 100 feet westerly. The straight edgestone and granite paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Gove street, from Cottage street to easterly line of Venice street, is about 428 feet in length. The contract for constructing the surface of this street was awarded to the Warren Brothers Company on October 5, 1917. Work was begun October 16, 1917, and suspended December 4, 1917. Work was resumed March 25, 1918, and completed April 26, 1918. It is a 50-foot street with granite edgestone, granite block gutters, $2\frac{1}{2}$ feet in width, laid on a 4-inch concrete base with cement grout joints, and has a Topeka pavement laid on a 4-inch concrete base, and brick sidewalks, 8 feet in width. The work this year consisted of laying Topeka pavement, except about 133 feet at the Venice street end which was laid last year. Brick sidewalks were laid also. The sidewalk bricks were furnished by the city on the line of work. All other materials were furnished by the contractor.

Grove street, from Centre street to Washington street, is about 3,106 feet in length. The contract for grading this street was awarded to the Central Construction Company January 4, 1918. Work was begun January 23, 1918, suspended February 25, 1918, resumed March 26, 1918, and again suspended January 25, 1919. It is a 60-foot street and the work has consisted of earth and rock excavation by the contractor.

Hunnewell street, from Champney street to Atkins street, is about 458 feet in length. A contract to build the artificial stone sidewalks on this street was awarded to the Pignat-Vicenzi Mosaic Company July 23, 1918. This street is a 40-foot street with 7-foot sidewalks. The city paving force set the edgestone, did the subgrading, paved the granite block gutters and laid a water-bound macadam surface. The artificial stone sidewalks were laid under a five-year maintenance guaranty. Work under the contract was begun August 7, 1918, and completed August 22, 1918.

Minton street, from Amory street to Brookside avenue, is about 422 feet in length. The contract for constructing the surface of this street was awarded to Warren Brothers Company October 5, 1917. Work was begun March 29, 1918, and completed June 28, 1918. It is a 40-foot street with granite edgestones, block gutters, $2\frac{1}{2}$ feet in width, laid on a 4-inch concrete base with grout joints, and has a Topeka pavement laid on a 4-inch concrete base, and artificial stone sidewalks 7 feet in width.

The artificial stone sidewalks were laid under a five-year maintenance guaranty. The straight edgestone and second-hand granite paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor.

Museum road, from Huntington avenue to the Fenway, is about 628 feet in length. The contract for constructing the surface of this street was awarded to Warren Brothers Company on October 5, 1917. Work was begun November 5, 1917, and suspended December 10, 1917. Work was resumed March 26, 1918, and completed June 13, 1918. It is a 50-foot street with granite edgestone, granite block gutters, 2½ feet in width, laid on a 4-inch concrete base with grout joints, and has a Topeka pavement laid on a 4-inch concrete base and artificial stone sidewalks, 8 feet in width. The artificial stone sidewalks were laid under a five-year maintenance guaranty. The work this year consisted of laying concrete base and Topeka pavement for a distance of about 258 feet at the Fenway end, and laying artificial stone sidewalks. A small amount of straight edgestone was furnished by the city and hauled by the contractor.

Neptune road, from Bennington street to the Boston, Revere Beach & Lynn Railroad Bridge, is about 1,711 feet in length. The contract to construct this street was awarded to the Central Construction Company October 9, 1916. Work was begun July 11, 1917, and suspended December 12, 1917. Work was resumed July 26, 1918, and completed August 28, 1918. The street as constructed is 100 feet in width, consisting of two 20-foot roadways, a central reservation, or planting space, 20 feet wide and a 20-foot sidewalk on each side consisting of an artificial stone sidewalk 10 feet wide and a loam space 10 feet in width. The contractor did the subgrading, set the edgestone, furnished and laid a 4-inch concrete base on the roadways, on which was laid the asphalt pavement. A granite block gutter, with grout joints on a concrete base, was laid along the edgestone, loam was furnished, graded and seeded on the reservation and the artificial stone sidewalks were furnished and laid. The contractor also built fences where the slopes were high and furnished and laid rip-rap where the sea washed the slopes. The city furnished the edgestone and a part of the paving blocks for gutters. All other materials were furnished by the contractor. The asphalt pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Nevada street, from Fairmount street to Wilmington avenue, is about 258 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 5, 1917. Work was begun May 28, 1918, and completed August 19, 1918. It is a 50-foot street with a 34-foot tar macadam roadway, granite edgestone and 8-foot artificial

stone sidewalks. The straight edgestone was furnished by the city and hauled by the contractor. The circular edgestone and tar binder was furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Norfolk street, from Blue Hill avenue to Corbet street, is about 3,780 feet in length. A contract for the construction of the surface of this street was awarded to the Central Construction Company July 17, 1917. Work was begun August 13, 1918, and completed November 21, 1918. It is a 60-foot street, with a 44-foot bitulithic roadway, on a 6-inch Portland cement concrete base, granite edgestone and 8-foot artificial stone sidewalks. The street was rough graded and the edgestone set between Blue Hill avenue and Clarkwood street in 1917. The remainder of the work was done this year. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks and bitulithic roadway were laid under a five-year maintenance guaranty.

North Beacon street, from Cambridge street to Market street, is about 3,267 feet in length. A contract for the construction of this street was readvertised and awarded to Warren Brothers August 24, 1918. Work was started August 26, 1918, and suspended January 7, 1919. It is a 60-foot street with sidewalks 10 feet in width. The contractor set the edgestone, did the subgrading, took down a number of large trees, laid a 6-inch concrete base, and paved with bitulithic. Most of the cinder foundation for the artificial stone sidewalks has been put in and the walks will be completed in the spring of 1919. The straight edgestone, corners and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The bitulithic pavement was laid under a five-year maintenance guaranty.

Overland street, from Brookline avenue to the Boston & Albany Railroad, is about 399 feet in length. A contract to construct this street was awarded to the James J. Coughlan Company October 16, 1917. Work was started October 25, 1917, and suspended November 30, 1917. Work was resumed July 19, 1918, and completed August 8, 1918. This street as constructed is 40 feet wide with 6-foot artificial stone sidewalks. The contractor did the grading, set the edgestone, laid a 6-inch Portland cement base and paved the roadway with granite blocks. He also furnished and laid the artificial stone sidewalks. The recut granite paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Park Vale avenue, from Brighton avenue to Glenville avenue, is about 890 feet in length. A contract to pave the

surface of this street with asphalt was awarded to the Bermudez Company July 2, 1918. Work was started July 9, 1918, and completed August 31, 1918. This is a 40-foot street with sidewalks 7 feet in width. The contractor did the subgrading, set the edgestone, furnished and laid the 6-inch concrete base and laid the asphalt pavement. Artificial stone sidewalks were constructed where necessary to complete the street. The city furnished the edgestone required and the contractor furnished all other material. The asphalt pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Pontiac street, from Tremont street to Hillside street, is about 936 feet in length. A contract to construct this street was awarded to J. C. Coleman & Sons Company October 22, 1917. Work was begun October 26, 1917, and suspended June 19, 1918. This street when constructed is to be 40 feet wide and have 7-foot sidewalks, granite edgestone and 3-foot granite block gutters. The street as laid out called for a heavy rock cut and earth fill. Most of the work has been done by the contractor who has built two heavy rubble retaining walls and wooden fences on top of same. Work was suspended to allow the Water and Sewer Departments to put in their underground structures.

Radford lane, from Carruth street, across Bushnell street, is about 432 feet in length. A contract for constructing the artificial stone sidewalks on this street was awarded to Frank Drinkwater July 2, 1918. Work was started July 8, 1918, and completed July 25, 1918. All materials were furnished by the contractor and the sidewalks laid under a five-year maintenance guaranty.

Ralston street, from Dorchester avenue to Old Colony avenue, is about 1,127 feet in length. A contract for constructing this street was awarded to William J. Rafferty & Co. on October 9, 1917. Work was begun October 18, 1917, and suspended December 15, 1917. Work was resumed April 11, 1918, and completed May 21, 1918. It is a 40-foot street with granite edgestones, 5-inch crushed stone sidewalks, 7 feet in width, flagging crosswalks at Dorchester avenue, and has a 6-inch bituminous macadam roadway. Concrete retaining walls were constructed on each side for a short distance near Dorchester avenue. The work this year consisted mainly in constructing the 6-inch macadam roadway. The tar binder for the roadway was furnished by the city on the line of work and all other materials were furnished by the contractor.

Southwick street, from Neponset avenue to Freeport street, is about 359 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was started August 8, 1916, and suspended November 4, 1916. Work was resumed July 19, 1917, suspended December 14, 1917, again resumed March 27, 1918, and completed March 29, 1918. It is a 40-foot street with a 26-foot sheet asphalt roadway on a 4-inch concrete base,

granite edgestone and 7-foot artificial stone sidewalks. A part of the sidewalk was omitted on the easterly end of the street on account of the continual settlement of the fill. The work done this season consisted of laying the sheet asphalt pavement. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. The asphalt roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Stratton street, from Lucerne street across Lyford street, is about 916 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 5, 1917. Work was started April 11, 1918, and completed July 23, 1918. It is a 40-foot street with a tar macadam roadway, granite block gutters and 6-foot crushed stone sidewalks on the north side and 7-foot artificial stone sidewalks with granite edgestone on the south side. The straight edgestone and granite paving blocks were furnished by the city and hauled by the contractor. The circular edgestone and tar binder were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Wilmington avenue, from Milton avenue to Nevada street, is about 616 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 5, 1917. Work was started May 16, 1918, and completed August 19, 1918. It is a 50-foot street with a 34-foot tar macadam roadway, granite edgestone and 8-foot artificial stone sidewalks. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone and tar binder were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

ARTIFICIAL STONE SIDEWALKS.

Amory street (north side), from east side of Bragdon street about 384 feet westerly. A contract for constructing an artificial stone sidewalk, 8 feet in width, was awarded to Joseph A. Singarella June 21, 1918. Work was begun June 20, 1918, and completed July 9, 1918. The artificial stone sidewalk was laid under a five-year maintenance guaranty. Eleven tree pits were also constructed. The contractor furnished all material.

Atlantic avenue (easterly side), from Summer street to 370 feet north of Congress street, is about 950 feet in length. A contract to construct artificial stone sidewalks on this street was awarded to John Landis & Co. October 17, 1917. Work was started November 5, 1917, and suspended December 7, 1917. Work was resumed March 19, 1918, and completed April 26, 1918. All material necessary to do the

work was furnished by the contractor. The sidewalks were laid under a five-year maintenance guaranty.

Back street—on the southerly side of this street near Hereford street, for a length of 123 feet, a sidewalk was constructed. A contract to construct this sidewalk was awarded to the Pignat-Vicenzi Mosaic Company July 23, 1918. The contractor omitted the cinder foundation and laid the new artificial stone walk on top of the old sidewalk which was low for grade. All material was furnished by the contractor. The sidewalk was laid under a five-year maintenance guaranty.

Beach street, from Harrison avenue to Atlantic avenue, is about 1,247 feet in length. It is a 50-foot street with a roadway 32 to 34 feet in width and sidewalks 8 to 9 feet in width. A contract for paving this street with special cut granite blocks on a 6-inch Portland cement concrete base was awarded to Bernard E. Grant August 26, 1916. The contractor did the excavating, reset the edgestone, paved the roadway and replaced the existing brick sidewalks with artificial stone. The car tracks of the Boston Elevated Railway were set to grade and the space between the rails was paved with special cut granite blocks on a 6-inch concrete base. In 1917 the south roadway was paved with special cut granite blocks, pitch joints, on a 6-inch concrete base, and in 1918, due to a bad settlement of the paving caused by the construction of the new Sub-Postal Station, the blocks were relaid with grout joints by Coleman Brothers. On August 16, 1918, a contract to complete the artificial stone sidewalks was awarded to V. Grande. The contractor completed the walks September 11, 1918. The straight edgestone and corners were furnished by the city and hauled by the contractor; the circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractors. The granite block pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Brookside avenue, from Boylston street to Green street, is about 2,041 feet in length. The contract for constructing artificial stone sidewalks was awarded to Warren Brothers Company August 16, 1917. Work was started November 6, 1917, and suspended December 11, 1917. Work was resumed May 20, 1918, and completed July 9, 1918. Work this year consisted of setting a part of the edgestone, laying a part of the granite block gutters, and constructing artificial stone sidewalks. The straight edgestone, corners and granite paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The sidewalks were laid under a five-year maintenance guaranty.

Brown avenue, from Poplar street to Blakemore street, is about 2,311 feet in length. A contract for constructing artificial stone sidewalks on this street was awarded to Charles J. Jacobs Company August 7, 1917. Work was begun August 15, 1917, and suspended October 22, 1917. Work was resumed

and completed August 10, 1918, the street being practically completed in 1917. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Canal street, from Haymarket square to Washington street, is about 1,125 feet in length. It is a 74-foot street with a 50-foot roadway and sidewalks varying in width from 10 to 15 feet in width. A contract for repaving this street with the existing granite block was awarded to Bernard E. Grant August 26, 1916. Under the contract it was the intention to relay the existing granite block, but at the request of the abutters special cut granite block with grout joints was laid on the existing concrete base. The straight edgestone was furnished by the city and hauled by the contractor; all other materials were furnished by the contractor. The car tracks were set to grade and the space between the rails was paved with special cut granite blocks on a concrete base, grout joints. Artificial stone sidewalks were laid where directed. Work on this contract was suspended July 9, 1917. On August 16, 1918, a contract to complete the artificial stone sidewalks was awarded to V. Grande. The contractor began work on the artificial stone sidewalks September 9, 1918, and completed them September 10, 1918. The granite block pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Cleveland place, from Margaret street to Snow Hill street, is about 255 feet in length. The contract for constructing artificial stone driveway in this place was awarded to V. Grande October 16, 1917. Work was started April 30, 1918, and completed May 29, 1918. A small amount of edgestone was reset and the brick sidewalks were relaid on the approaches. Artificial stone driveway (extra depth) was constructed under a five-year maintenance guaranty. One small corner was furnished by the city and hauled by the contractor. All other materials were furnished by the contractor.

Evergreen street (westerly side), from South Huntington avenue to Day street, is about 847 feet in length. A contract for constructing artificial stone sidewalks on this street was awarded to Warren Brothers Company August 16, 1917. Work was started July 18, 1918, and completed August 12, 1918. Edgestone was set and reset, granite block gutter was laid and relaid and an artificial stone sidewalk 7 feet in width was laid under a five-year maintenance guaranty. The straight edgestone, corners and second-hand granite blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor.

Hanover street, from Court street to Commercial street, is about 3,309 feet in length. The contract for constructing artificial stone sidewalks in this street was awarded to V. Grande October 9, 1917. Work was begun October 16, 1917, and suspended December 14, 1917. Work was resumed April 30, 1918, and completed June 4, 1918. The sidewalks were laid under a five-year maintenance guaranty.

Ridge street, from Brown avenue to Sycamore street, is about 740 feet in length. The contract for constructing artificial stone sidewalks in this street was awarded to Charles J. Jacobs August 7, 1917. Work was started October 10, 1917, and suspended December 8, 1917. Work was resumed July 12, 1918, and completed August 10, 1918. All materials were furnished by the contractor. The sidewalk was laid under a five-year maintenance guaranty.

Sherwood street, from Ashland street to Florence street, is about 1,561 feet in length. The contract for constructing artificial stone sidewalks in this street was awarded to Charles J. Jacobs August 7, 1917. Work was started August 30, 1917, and suspended October 18, 1917. Work was resumed and completed August 8, 1918, most of the work being done in 1917. All materials were furnished by the contractor. The sidewalks were laid under a five-year maintenance guaranty.

Sycamore street, from Florence street to Ashland street, is about 1,263 feet in length. The contract for constructing artificial stone sidewalks in this street was awarded to Charles J. Jacobs August 7, 1917. Work was begun October 19, 1917, and suspended December 8, 1917. Work was resumed June 19, 1918, and completed August 6, 1918. The straight edgestone, corners and second-hand granite blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The sidewalks were laid under a five-year maintenance guaranty.

Washington street, from Haymarket square to Elm street, is about 738 feet in length with a roadway from 40 to 65 feet in width and sidewalks 10 feet in width. A contract for paving this street with special cut granite blocks on a 6-inch Portland cement concrete base, grout joints, was awarded to Bernard E. Grant August 26, 1916. The contractor did the excavating, reset the edgestone and paved the roadway. The straight edgestone and corners were furnished by the city and hauled by the contractor; the circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The tracks of the Boston Elevated Railway were brought to grade and the space between the rails paved by the company. Work on this contract by Bernard E. Grant was suspended September 24, 1917. By order of the Commissioner of Public Works this contract was cancelled with Grant and the city paving force was ordered to complete the granite block paving. A contract to construct the artificial stone sidewalks was awarded to V. Grande August 16, 1918. The city force completed the roadway with special cut granite blocks, grout joints, on a 6-inch concrete base. The artificial stone sidewalks were completed by V. Grande September 3, 1918. The granite block pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Work Done by Contract, 1918.

	Old.	New.	Total. Old and New.
Edgestone set.....	46,236 linear feet.	24,034 linear feet.	70,270 linear feet.
Crushed stone foundation for edgestone.....	.....	1,272 " "	1,272 " "
Concrete base laid.....	35,132 square yards. ¹	134,103 square yards.	169,235 square yards.
Granite block paving laid on gravel base, with gravel joints.....	7,172 " "	4,515 " "	11,687 " "
Flagging crosswalks laid on gravel base, with gravel joints.....	86 " "	.....	86 " "
Granite block paving laid, with grout joints.....	12,347 " "	114,604 square yards.	126,951 " "
Flagging crosswalks laid with grout joints.....	24 " "	324 " "	348 " "
Granite block paving laid with pitch and pebble joints.....	155 " "	558 " "	713 " "
Flagging crosswalks laid with pitch and pebble joints.....	35 " "	.....	35 " "
Granite block paving laid with asphalt joints.....	.....	607 square yards. ⁷	607 " "
Flagging crosswalks laid with asphalt joints.....	.....	49 " "	49 " "
Asphalt and binder laid.....	.....	38,187 " "	38,187 " "
Extra bituminous concrete binder for asphalt laid.....	157 cubic yards.	.....	157 cubic yards.
Bitulithic pavement laid.....	.....	33,257 square yards. ¹⁰	33,257 square yards.
Brick pavement laid.....	.....	898 " "	898 " "
Filbertine pavement laid.....	.....	959 " "	959 " "
Topeka pavement laid.....	.....	9,092 " "	9,092 " "
Wood block pavement laid.....	61 square yards.	607 " "	668 " "
Bituminous patching, full depth.....	.....	.....	46,509 " "

Bituminous surface patching.....	129 square yards.	12,518 square yards. ¹¹	1,511 "	" "
Macadam surface placed (tar penetration).....			12,647 "	" "
Macadam surface placed (water bound).....		1,029 "	1,629 "	" "
Artificial stone sidewalks laid.....	2,811 square yards.	55,635 "	58,446 "	" "
Brick sidewalks laid.....	5,944 "	569 "	6,513 "	" "
Crushed stone sidewalks laid.....		780 "	780 "	" "
Earth excavation.....			29,047 cubic yards.	
Water box excavation.....			156 "	" "
Rock excavation.....			8,783 "	" "
Filling furnished.....			4,504 "	" "
Loam graded and seeded.....			175 square yards.	
Covers reset.....			573 covers.	
Blind drain.....		347 linear feet.	347 linear feet.	
Concrete wall.....		407 "	407 "	" "
Rubble wall with concrete cap and wooden fence.....		517 "	517 "	" "
Wood fence.....		80 "	80 "	" "
Tree spaces.....		11 tree spaces.	11 tree spaces.	

Explanations of Numerals on Preceding Pages.

1 Concrete base laid four (4) inches deep.....	8,079 square yards.
Concrete base laid six (6) inches deep.....	126,024
Total concrete base laid.....	134,103 square yards.
2 Laid with second-hand blocks, formerly macadam.....	567 square yards.
Laid with second-hand blocks, formerly gravel.....	411
Laid with second-hand blocks, formerly cobble gutters.....	544
Old blocks, formerly granite block, pitch and pebble joints.....	697
Old blocks, formerly granite block, gravel joints.....	5
Old blocks, formerly granite block, cement grout joints.....	2,291
Total granite block paving laid on gravel base with gravel joints (new).....	4,515 square yards.
3 New blocks, formerly macadam.....	5,558 square yards.
New blocks, formerly granite block, pitch and pebble joints.....	17,752
New blocks, formerly granite block, gravel joints.....	35,305
Recent blocks, formerly granite block, gravel joints.....	25,177
Recent blocks, formerly brick sidewalk.....	1,267
Second-hand blocks, formerly macadam.....	10,047
Second-hand blocks, formerly gravel.....	526
Second-hand blocks, formerly granite block paving, gravel joints.....	42
Old blocks, formerly granite block paving, pitch and pebble joints.....	5,776
Old blocks, formerly granite block paving, gravel joints.....	10,388
Old blocks, formerly macadam.....	2,713
Old blocks, formerly gravel.....	73
Total granite block paving laid with grout joints (new).....	114,604 square yards.
4 New blocks.....	9,702 square yards.
Old blocks relaid.....	2,645
Total granite block paving laid with grout joints (old).....	12,347 square yards.
5 Old flagging, formerly gravel joints.....	199 square yards.
Old flagging, formerly pitch and pebble joints.....	125
Total flagging crosswalks laid with grout joints (new).....	324 square yards.
6 Formerly granite block paving, gravel joints.....	
7 New blocks, formerly granite block paving, gravel joints.....	532 square yards.
Old blocks, formerly granite block paving, gravel joints.....	75
Total granite block paving laid with asphalt joints (new).....	607 square yards.

* Old flagging, formerly gravel joints. Old flagging, cement gravel joints. Old flagging, cement gravel joints. Old flagging, cement gravel joints (new). Total flagging crosswalks laid with asphalt joints (new).	15 square yards. 20 " " 14 " " " "	49 square yards.
* Formerly gravel. Formerly macadam. Total asphalt and binder laid (new).	3,660 square yards. 34,527 " " " "	38,187 square yards.
10 Formerly macadam. Formerly gravel. Formerly not graded. Total bitulithic pavement laid (new).	21,328 square yards. 3,979 " " 7,960 " " " "	33,257 square yards.
11 Formerly granite block paving, gravel joints.		
12 Formerly macadam.		
13 Formerly macadam. Formerly gravel. Formerly not graded. Total Topdosa pavement laid (new).	6,156 square yards. 2,724 " " 212 " " " "	9,092 square yards.
14 Formerly granite block paving, gravel joints.		
15 Resurfaced bitulithic. Resurfaced asphalt. Replaced macadam. Total bituminous patching, full depth.	10,864 square yards. 34,966 " " 679 " " " "	46,509 square yards.
16 Resurfaced bitulithic. Resurfaced asphalt. Total bituminous surface patching.	1,497 square yards. 14 " " " "	1,511 square yards.
17 Formerly gravel. Formerly not graded. Total macadam surface placed, tar penetration (new).	9,020 square yards. 3,498 " " " "	12,518 square yards.
18 Formerly gravel.		

Attention is called to the fact that in addition to changes in pavements shown in this table, changes are also caused by work done by department forces, Boston Elevated Railway, Park and Recreation Department, etc. A summary of all changes made is shown on page 59.

Work Done by Paving Service Forces, 1918.

	Old.	New.	Total. Old and New.
Edgestone set.	27,814 linear feet.	5,413 linear feet.	33,227 linear feet.
Concrete base laid.	814 square yards.	909 square yards.	1,723 square yards.
Granite block paving laid with gravel joints.	54,950 "	285 "	55,235 "
Granite block paving laid with pitch and pebble joints.	723 "	"	723 "
Granite block paving laid with grout joints.	16,202 "	11,440 square yards.	27,642 "
Gutter paving laid with gravel joints.	20,818 "	2,304 "	23,122 "
Gutter paving laid with pitch and pebble joints.	"	"	"
Gutter paving laid with grout joints.	4,684 "	211 "	4,899 "
Flagging crosswalks laid with gravel joints.	30 "	"	30 "
Flagging crosswalks laid with pitch and pebble joints.	3,239 "	"	3,239 "
Flagging crosswalks laid with grout joints.	"	"	"
Wood block pavement laid with sand joints.	"	378 square yards.	378 square yards.
Topicks pavement laid.	93,953 "	8,435 "	102,388 "
Macadam surface placed (water bound).	91,241 "	13,019 "	104,260 "
Macadam surface placed (tar penetration).	32,568 "	59,837 "	92,405 "
Macadam surface placed (asphalt penetration).	230,159 "	17,500 "	247,659 "
Macadam surface patched.	8,703 "	"	8,703 "
Asphalt spread on macadam (blanket coat).	80,729 "	"	80,729 "
Tar spread on macadam (blanket coat).	80,477 "	140 "	80,617 "
Brick sidewalks laid.	521 "	81 "	602 "
Artificial stone sidewalks laid.	275 "	"	275 "
Asphalt block sidewalk laid.	267 "	81 "	348 "
Sidewalk excavating.	2,135 cubic yards.	"	2,135 cubic yards.
Roadway excavating.	51,729 square yards.	10,843 "	62,572 square yards.
Gravel or crushed stone sidewalks surfaced.	90,034 "	"	90,034 "
Grading (no pavement laid).	"	"	"
Grading (no pavement laid).	"	"	"
Rock excavating.	1,747 "	686 "	2,433 cubic yards.
Brick block pavement laid.	"	"	2,433 square yards.

FINANCIAL STATEMENT, PAVING SERVICE.

Maintenance.

Appropriation	\$1,115,283 17
Expended during the year	1,093,630 65
	<hr/>
Unexpended balance to city treasury	<u>\$21,652 52</u>

Special Appropriations.

Granolithic sidewalks:	
Balance February 1, 1918	\$18,792 22
Appropriation (from taxes)	100,000 00
	<hr/>
	\$118,792 22
Transferred to Soldiers' Relief Department	75,000 00
	<hr/>
	\$43,792 22
Expended during the year	36,703 13
	<hr/>
Balance January 31, 1919	<u>\$7,089 09</u>
Reconstructing and repairing streets by contract:	
Balance February 1, 1918	\$172,457 67
Appropriation (from taxes)	\$318,819 27
Appropriation (from taxes)	1,541,597 61
	<hr/>
	1,860,416 88
	<hr/>
	\$2,032,874 55
Transferred to street improvements	491,276 94
	<hr/>
	\$1,541,597 61
Expended during the year	497,830 14
	<hr/>
Balance January 31, 1919	<u>\$1,043,767 47</u>

Street Improvements.

Transferred from reconstructing and repairing streets, by contract	\$491,276 94
Expended during the year	465,067 13
	<hr/>
Balance January 31, 1919	<u>\$26,209 81</u>

Summary of Expenditures.

Paving Service	\$1,093,630 65
Highways, making of	258,739 07
Belgrade avenue extension and Beech street widening	1,717 11
Chelsea street, Charlestown, widening	8,373 89
	<hr/>
Carried forward	\$1,362,460 72

<i>Brought forward</i>	\$1,362,460 72
Charles street (now Caledonian avenue), from Spring street to Hamilton street	47 00
Granolithic sidewalks	36,703 13
Reconstructing and repairing streets by con- tract	497,830 14
Street improvements	465,067 13
Hyde Park avenue widening	4,121 99
Norfolk street, Dorchester, widening	79,037 46
	<hr/>
	<u>\$2,445,267 57</u>

INCOME.

Statement showing the amount of bills deposited with the City Collector from February 1, 1918, to January 31, 1919, and credited to general revenue:

Edgestone and sidewalk assessments	\$46,213 53
Permits	12,088 21
Services of inspectors	7,094 33
Labor, material furnished, junk sold, rents, etc.,	8,048 45
	<hr/>
	<u>\$73,444 52</u>

Amount paid into city treasury during the year:

Edgestone and sidewalk assessments	\$28,099 83
Permits	10,630 46
Services of inspectors	6,304 19
Labor, material furnished, junk sold, rents, etc.,	9,681 67
	<hr/>
	<u>\$54,716 15</u>

**Objects of Expenditures from the Maintenance Appropriation, Classified by Districts, from February 1, 1918,
to January 31, 1919.**

Districts.	Macadam Repairs.	Block Repairs.	Removal of Snow.	Street Cleaning.	Edgestone and Sidewalk Repairs.	Crosswalk Repairs.	Street Work.	Schedule A, Miscellaneous.	Totals.
South Boston and Dorchester North.....	\$12,518 41	\$4,091 57	\$6,804 56	\$3,222 77	\$9,374 80	\$503 19	\$20,477 56	.....	\$57,492 86
East Boston and Breed's Island.....	8,145 74	1,114 50	4,960 28	1,212 53	5,694 64	82 23	21,004 17	.....	42,214 09
Charlestown.....	7,603 12	8,824 44	5,986 21	757 73	5,570 69	327 27	951 63	.....	30,021 09
Brighton.....	15,904 06	35 00	4,469 54	14,409 88	2,296 24	204 53	14,348 15	.....	51,668 00
West Roxbury.....	31,662 07	668 75	9,333 57	20,354 96	4,400 52	305 00	14,594 50	.....	81,319 37
Dorchester.....	25,394 33	1,309 96	6,898 92	11,404 40	7,407 00	32 16	30,756 62	.....	83,203 39
Roxbury South and Jamaica Plain.....	27,374 28	5,906 48	20,327 95	43,082 23	10,648 04	1,981 23	20,046 72	.....	129,366 93
South End and Roxbury North.....	11,508 54	10,328 58	12,586 11	3,106 04	18,358 88	3,469 34	23,595 58	.....	82,953 07
Ashmont.....	19,004 51	120 60	3,670 56	3,789 75	2,642 73	15 50	14,164 39	.....	43,408 04
North and West Ends and Back Bay.....	7,989 68	10,236 30	9,522 78	2,891 07	9,102 22	1,732 09	3,070 57	.....	44,544 71
Hyde Park.....	14,181 37	.....	2,441 71	7,084 49	1,080 49	.....	7,535 55	.....	32,323 60
Miscellaneous.....	.....	.....	.....	.....	.....	.....	.....	\$415,115 50	415,115 50
Totals	\$181,286 71	\$42,636 18	\$37,002 19	\$111,315 85	\$77,076 24	\$8,652 54 *	\$170,545 44	\$415,115 50	\$1,063,630 65

* Of this amount \$18,226.88 is shown in the detail of street work charged to appropriation for Street Improvements.

SCHEDULE A.

Salary of division engineer (part of)		\$3,750 00
Salary of chief engineer (part of)		1,550 00
Salary of engineer in charge (part of)		350 00
Salaries of office clerks and stenographers		1,869 77
Salaries of assistant engineers (office work)		8,210 98
Salaries of assistant engineers and inspectors on traffic		6,124 54
Salaries of permit office clerks		9,007 78
Salaries of permit office inspectors		16,663 26
Salaries of inspectors on artificial stone sidewalks		713 31
Salaries of engineering inspectors (office work)		1,688 52
Salaries of district inspectors		3,836 63
Salaries of street numbering clerks		1,278 60
Salary of medical inspector (part of)		500 00
Medical attendance on injured employee (outside),		30 00
Salary of chief veterinarian (part of)		500 00
Salary of inspector of horses		1,161 96
Salary of constable		1,461 14
Pensions paid to veterans of Civil War (retired),		11,847 96
Pensions paid to retired laborers		30,069 68
Compensation allowed injured employees		2,140 28
Allowance to employees on military and naval service		4,453 62
Vacations allowed laborers, mechanics, etc.		27,565 71
Holidays, not including holidays charged to street accounts		53,116 79
Automobile expense, division engineer		3,255 75
Gasolene, oil, grease, etc.	\$276 24	
Repairs	457 41	
New tires and tubes	259 53	
Repairing tires and tubes	15 50	
Supplies, etc.	47 07	
Miscellaneous	10 00	
Wages of chauffeur	1,092 00	
New Buick car	1,098 00	
Automobile expense, engineer in charge		2,034 13
Gasolene, oil, grease, etc.	351 07	
Repairs	277 15	
New tires and tubes	192 13	
Repairing tires and tubes	4 00	
Supplies, etc.	52 78	
Miscellaneous	65 00	
Wages of chauffeur	1,092 00	
Automobile expense, chief inspector		2,057 16
Gasolene, oil, grease, etc.	243 52	
Carried forward	\$243 52	\$195,237 57

<i>Brought forward</i>	\$243 52	\$195,237 57
Repairs	173 69	
New tubes and tires	278 75	
Repairing tubes and tires	74 70	
Storage	180 00	
Supplies, etc.	4 50	
Miscellaneous	10 00	
Wages of chauffeur	1,092 00	
Automobile expense, foreman Brighton district		1,771 58
Gasolene, oil, grease, etc.	328 99	
Repairs	171 78	
New tires and tubes	180 90	
Repairing tires and tubes	11 25	
Supplies, etc.	20 16	
Miscellaneous	10 00	
Wages of chauffeur	1,048 50	
Automobile expense, foreman Dorchester district,		513 07
Gasolene, oil, grease, etc.	204 51	
Repairs	128 62	
New tires and tubes	143 15	
Repairing tires and tubes	4 69	
Supplies, etc.	14 83	
Miscellaneous	17 27	
Automobile expense, emergency car		1,321 52
Gasolene, oil, grease, etc.	301 71	
Repairs	689 59	
New tires and tubes	296 84	
Repairing tires and tubes	2 50	
Supplies, etc.	20 88	
Miscellaneous	10 00	
Automobile expense, claim agent		153 55
Gasolene, oil, grease, etc.	27 60	
New tires and tubes	37 79	
Repairs	80 96	
Supplies	7 20	
Printing		2,747 82
Postage		271 65
Stationery		635 75
Traveling expenses, car fares, etc.		675 40
Advertising		100 88
Engineering supplies and incidentals		1,767 01
Stationery	698 14	
Printing	249 19	
Postage	148 40	
Car fares	64 33	
Transit repairs	337 80	
Miscellaneous	269 15	
Chemical laboratory, supplies		12 82
<i>Carried forward</i>		\$205,208 62

<i>Brought forward</i>	\$205,208 62
Artificial stone sidewalks (see reconstructing and repairing streets by contract)	58 04
Asphalt and bitulithic pavements repaired (see reconstructing and repairing streets by contract)	3,496 85
Amount paid Central Construction Company	\$1,959 65
Temporary repairs, labor, teaming and materials	1,537 20
Brick block repairs, labor, materials, etc.	1,842 45
Wood block repairs, labor, materials, etc.	5,271 55
New crosswalks, not included elsewhere	70 05
Fence repairs	8,333 86
Plankwalk repairs	1,871 05
Edgestones, sidewalks and gutters (new) not included elsewhere	2,216 31
Rent of land, wharves, etc. (net)	2,234 32
Taxes (net)	430 01
Expense of stables, including drivers, feeders, fodder, horseshoeing, repairs to harnesses, wagons, carts, etc.	\$152,815 33
Amount earned by department teams	132,452 75
	<hr/>
	20,362 58
Electric lighting at yards and stables	1,390 74
Gas lighting at yards and stables	216 98
Fuel for heating yard buildings, offices and stables	4,295 70
Electric appliances, labor and materials, yards and stables	133 84
Rent of towels	140 75
Stoves, pipes, grates, etc.	360 72
Telephone service	1,511 61
Derricks, repairing, etc.	127 40
Oil for lighting around defects, etc.	1,260 77
Ice	145 65
Signs, making and putting up	12,523 79
Labor at snow dumps	508 58
Tools, hardware, etc., new, cost of repairing, etc., Labor, teaming, etc., assisting fuel distributor	23,029 93
Expense of yards, including salaries of foremen, clerks, yardmen, watchmen, tool wagons, etc., Repairs of yard buildings, stables, sheds, shanties, etc.	12,717 31
	36,059 82
	7,959 44
Sanding icy and slippery streets	4,640 43
Repairing culverts and building new culverts	98 53
Hoisting engine, fuel and supplies	141 80
<i>Carried forward</i>	\$358,659 48

<i>Brought forward</i>	\$358,659 48
Uniforms, etc.	50 00
Chests for Central Office, making of, etc.	29 07
Premium on surety bonds	9 00
Freight, cartage and demurrage	116 91
Marking catch-basins	156 00
Cleaning catch-basins	96 75
Photographs	252 10
Trimming and removing trees	52 75
Damages	15 23
Repairs to and inspection of typewriters and adding machines	58 45
Plan cases	39 62
Standpipe repairs	62 08
Services, real estate expert and auctioneer	85 00
Ensigns	34 45
Badges	56 75
Lead seals for cement bags	22 50
Teaming empty oil drums	14 00
Operating and maintaining concrete mixers	180 18
Work done and materials furnished, individuals, corporations, etc.	1,686 46
Sanitary Service, work done and materials furnished	58 95
Sewer Service, work done and materials furnished,	208 85
Water Service, work done and materials furnished,	175 54
Street Cleaning Service, work done and materials furnished	58 23
Lighting Service, work done and materials furnished	4 41
Bridge Service, work done and materials furnished	37 40
Park and Recreation Department, work done and materials furnished	132 00
Cemetery Department, work done and materials furnished	470 93
Schoolhouse Department, work done and materials furnished	10 60
Removing wreckage from Commercial street tank accident	1,489 75
Grading at Brighton Yard	849 66
Derrick boom for South Yard	100 00
Tar kettle for Brighton Yard	600 00
Buffalo steam roller, 15 ton	5,026 69
Steam rollers, cost of operating, repairing, etc.	\$19,707 71
Steam roller, amount earned	17,790 50
	1,917 21
Asphalt plant, setting up and maintaining	1,652 11
<i>Carried forward</i>	\$374,469 11

<i>Brought forward</i>		\$374,469 11
Asphalt plant operating	\$14,795 86	
Less material used on streets	10,922 08	
		3,873 78
Stock materials	\$121,418 72	
Stock, handling and teaming	40,046 83	
	\$161,465 55	
Less stocks delivered on streets	124,692 94	
		36,772 61
Total		<u>\$415,115 50</u>

STREET WORK DONE BY DEPARTMENT FORCE AND CHARGED
TO MAINTENANCE APPROPRIATION SHOWN IN DETAIL.
WORK ON OTHER STREETS SHOWN ON LARGE INSERT.

Neponset avenue (west side), from King square to Ashmont street. Length, 3,410 feet. Area, 3,597 square yards. Topeka roadway built, 456 square yards block paving, old blocks furnished and laid on concrete base with grout joints; 115 square yards block paving relaid with gravel joints on gravel base; 1,117 square yards granite block gutters relaid on gravel base with gravel joints, and 246 square yards flagging crosswalks relaid.

Labor, excavating for edgestone	\$2 25
Labor, resetting edgestone	7 50
Labor, gutter excavating	90 00
Labor, gutter repaving	388 87
Labor, roadway excavating	286 99
Labor, roadway paving	399 48
Labor, macadam excavating	709 94
Labor, macadam spreading	604 17
Labor, crosswalk excavating	12 00
Labor, crosswalk repaving	37 25
Labor, street cleaning	14 24
Steam roller, rolling	35 00
Steam roller, picking	56 00
Teaming	1,117 00
Gravel, 161 yards	254 06
Cement, 61 barrels	158 60
Sand, 22 yards	35 60
Blocks, 19,125 second-hand blocks	382 50
Road oil, 600 tons asphalt	4,602 59
	<u>\$9,194 04</u>

SPECIAL APPROPRIATIONS.

Belgrade avenue extension and Beech street widening. (Work not started.)

Engineering	\$874 77
Printing	52 02
Advertising	10 50
Amount paid to William J. Barry:	
843 cubic yards filling @ 50c.,	\$421 50
Labor	329 13
Insurance on labor	29 19
	779 82
	<u>\$1,717 11</u>

Charles street (now Caledonian avenue), from Spring street to Hamilton street.

Engineering \$47 00

Chelsea street, Charlestown, widening, from Chamber street to Foss street. (Work uncompleted.) Nine hundred nine square yards granite block pavement laid on concrete base, with grout joints, 15 square yards artificial stone walks laid, 30 square yards crosswalks relaid, 62 square yards brick walks relaid and 75 feet of edgestone reset.

Engineering	\$292 83
Engineering expense	1 98
Crushed stone, 207.6 tons	392 97
Gravel	7 82
Salt	10 80
Sand	97 74
Lumber	11 58
Flagging	23 60
Cement, 124 barrels	340 09
Bricks, 6,900 sidewalk	89 10
Edgestone	66 54
Blocks, 45,500 old granite	2,103 50
Teaming	861 75
Labor, grading walks	43 24
Labor, roadway excavation	1,605 96
Labor, roadway paving	799 29
Labor, concrete base	710 95
Labor, grouting joints	280 72
Labor, crosswalk excavation	131 66
Labor, crosswalk repaving	123 44
Labor, edgestone excavating	179 38
Labor, edgestone resetting	123 42
Labor, crushed stone sidewalk	11 00
Labor, repairing catch-basin	37 50
Labor, street cleaning	38 84

*\$8,385 70

Credit: Steam roller 21 00

\$8,364 70

Hyde Park avenue, Hyde Park. (Widening uncompleted.)

Engineering	\$38 79
Engineering expense	88
Teaming	818 00
Lumber	226 44
Labor, grading and filling	511 10
Artificial stone sidewalk laid	81 78

Amount paid to Thomas H. Corrigan, under contract:

Foundation walls and piers built at Nos. 1245-1249 \$830 00

Extra work — Build foundation under police station at No. 1243 890 00

Extra work — Build stalls, new sills, boarding in basement, new windows, doors, etc. 725 00

2,445 00

\$4,121 99

* Charged to special appropriation, Chelsea Street, \$8,373.89.
Credit on Highways, Making of, Chelsea Street, \$9.19.

Norfolk street, *Dorchester*, widening from *Corbet street* to *Blue Hill avenue*.
Length, 3,780 linear feet. Area, 19,208 square yards. Edgestone set
and reset, bitulithic pavement laid on macadam base and artificial
stone walks constructed.

Engineering	\$1,654 87
Engineering expense	22 30
Inspection	624 88
Edgestone, 3,054 feet straight, 252 feet 7 inches circular, 6 special cut stones, 26 small and 5 large corners	4,201 59
Filling, 1,831 yards	915 50
Teaming	47 00
Photographs	28 80
Printing	14 11
Advertising	22 00
Labor, making templets	4 00
Labor, handling stock	44 96
Labor, relocating manholes and catch-basins,	726 52

\$8,306 53

Credit: Old granite blocks, 6,400 128 00

\$8,178 53

Amount paid to *Warren Brothers*, under
contract:

Removing trees, etc.,	\$1,500 00
5,695 cubic yards earth excava- tion @ \$1.50	8,542 50
165 cubic yards rock excava- tion @ \$6	990 00
3,132 linear feet straight edge- stone and corners hailed and set @ 33c.,	1,033 56
86 linear feet circular edge- stone hauled and set @ 30c.	25 80
548 linear feet straight edge- stone hauled and set (stored at or near line of work) @ 22c.	120 56
1,630 linear feet existing edge- stone reset @ 20c.	326 00
34 square yards existing granite block paving relaid, gravel joints, @ 75c.	25 50
18,920 square yards concrete base and bitulithic wearing surface fur- nished and laid @ \$2.96	56,003 20
47,947 square feet artificial stone sidewalks furnished and laid @ 21c.	10,068 87
1,733 square feet artificial stone driveways furnished and laid @ 24c.	415 92
10 covers reset @ \$3	30 00

Carried forward \$79,081 91 \$8,178 53

<i>Brought forward</i>	\$79,081 91	\$8,178 53
Extra work — Furnish and lay 2-inch bitulithic surface on macadam base, where directed:		
1,007 square yards bitulithic wearing surface on macadam base, furnished and laid @ \$2.04,	2,054 28	
Extra work — Removing tree at No. 612 . . .	65 00	
Extra work — Removing tree at No. 354 . . .	60 00	
Extra work — Grade the filling where directed, outside the street lines of Norfolk street:		
17 hours, foreman, @ 75c. .	12 75	
167 hours, labor @ 55c. .	91 85	
Plus 15 per cent on \$104.60	15 69	
11 hours, steam roller, @ \$1.87½	20 63	
4 bags cement @ 80c. .	3 20	
½ ton crushed stone @ \$3 .	75	
10 cubic feet sand @ 8c. .	80	
		81,406 86
Amount paid to Central Construction Company, under contract:		
Removing trees, etc. (unfinished)	\$400 00	
4,762 cubic yards earth excavation @ \$1.19 .	5,666 78	
86 cubic yards rock excavation @ \$8	688 00	
1,862 linear feet straight edge-stone and corners hauled and set @ 29c.,	539 98	
544 linear feet straight edge-stone and corners hauled and set (unfinished) @ 13c. .	70 72	
134 linear feet circular edge-stone set @ 29c. .	38 86	
147 linear feet existing edge-stone reset @ 29c. .	42 63	
2,220 square feet artificial stone sidewalks furnished and laid (unfinished) @ 5c. .	111 00	
Extra work — Protect and light street during winter:		
32 weeks, street lighted, @ \$12.25	392 00	
	\$7,949 97	
Less amount paid in 1917,	5,400 64	
		2,549 33
		<u>\$92,134 72 *</u>

* \$13,097.26 of this amount has been charged to Highways, Making of.

GRANOLITHIC SIDEWALK CONSTRUCTION.

Adams street (west side), from *Codman street* to *Richmond street*. Length, 2,580 linear feet. Edgestone set, granite block gutters laid and artificial stone sidewalks constructed (unfinished work from 1917).

Engineering	\$30 54	
Engineering expense	30	
Amount paid to Warren Brothers Company under contract:		
Removing trees, etc.	\$10 00	
21 cubic yards rock excavation @ \$6	126 00	
2,095 linear feet straight edgestone hauled and set @ 30c.	628 50	
285 linear feet circular edgestone set @ 23c	68 55	
28 linear feet existing edgestone reset @ 19c.	5 32	
819 square yards granite block paving hauled and laid @ 85c.	696 15	
40 square yards existing granite block paving relaid @ 60c.	24 00	
45 square yards existing flagging crosswalks relaid @ 60c.	27 00	
16,509 square feet artificial stone sidewalks furnished and laid @ 18c.	2,971 62	
622 square feet artificial stone driveways furnished and laid @ 22c.	136 84	
3 covers reset @ \$3	9 00	
Extra work — Cut edgestone to fit driveway:		
1½ hours, stonecutter, @ 75c.	1 13	
Plus 15 per cent on \$1.13, Extra work — Repair the settlement over water trench:	17	
3 hours' labor @ 45c.	1 35	
Plus 15 per cent on \$1.35, Extra work — Rebuild Bradley head catch-basin at Codman street:	20	
3 hours, edgestone setter, @ 75c.	2 25	
12 hours' labor @ 45c.	5 40	
Plus 15 per cent on \$7.65, Extra work — Grade approach at Hillsdale street:	1 15	
12 hours' labor @ 45c.	5 40	
Plus 15 per cent on \$5.40,	81	
Carried forward	\$4,717 84	\$30 84

PUBLIC WORKS DEPARTMENT.

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<i>Brought forward</i>	\$4,717 84	\$30 84
Less amount paid in 1917	<u>3,686 36</u>	
		1,031 48
		<u><u>\$1,062 32</u></u>

Adams street, from King square to Ashmont street. Length, 3,450 linear feet. Area, 42,703 square feet. Edgestone set, gutters paved and artificial stone sidewalks constructed.

Engineering	\$79 76
Engineering expense	60
Edgestone, 55 feet 10 inches straight	70 38
Amount paid to D. M. Biggs & Co., under contract:	

Removing trees, bushes, etc.	\$100 00
19 cubic yards water-box excavation @ \$5	95 00
12.6 cubic yards rock excavation @ \$10	126 00
1,904 linear feet straight edgestone and corners hauled and set @ 30c.,	571 20
174 linear feet circular edgestone set @ 29c.	50 46
3,495 linear feet existing edgestone reset @ 18c.	629 10
233 linear feet crushed stone and concrete foundation furnished and placed @ 35c.	81 55
1,883 square yards existing granite block paving relaid @ 50c.	941 50
10 square yards existing flagging crosswalks relaid @ 90c.	9 00
42,090 square feet artificial stone sidewalks furnished and laid @ 18c.	7,576 20
963 square feet artificial stone driveways furnished and laid @ 18c.	173 34
12 covers reset @ \$3	36 00
Extra work — Regrade the settlement over sewer trench in sidewalks, between King and Lonsdale streets, set the concrete hydrant box opposite Rosemont street, trim the concrete at Boston Elevated Railway poles where directed and cut the circular edgestone now on street to fit the corner of Rosemont street:	
1½ hours, stone cutter, @ 81½c.	1 22

<i>Carried forward</i>	<u>\$10,390 57</u>	<u>\$150 74</u>
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<i>Brought forward</i>	\$10,390 57	\$150 74
65 hours' labor @ 36c.	23 40	
Plus 15 per cent on		
\$24.62	3 69	
Extra work — Build artificial stone steps and grade the bank in front of the Harris School:		
16½ hours, foreman, @ 75c.	12 38	
8 hours, paver, @ 81½c.	6 50	
52½ hours, finisher, @ 70c.	36 75	
19½ hours, helper, @ 45c.	8 78	
87½ hours' labor @ 39c.	34 13	
Plus 15 per cent on		
\$98.54	14 78	
Extra work — Excavate material above grade:		
54 cubic yards earth excavation @ \$1	54 00	
10½ hours, double team, @ 87½c.	9 19	
5 hours, single team, @ 62½c.	3 13	
347 cubic feet sand @ 6½c.	22 56	
160 cubic feet cinders @ 5c.	8 00	
40 bags cement @ 65c.	26 00	
72 feet B. M. spruce @ \$50 M.	3 60	
6 pounds lamp black @ 40c.	2 40	
Extra work — Grout the granite block pavement with Portland cement where directed:		
6 hours, foreman, @ 75c.	4 50	
10 hours, paver, @ 81½c.	8 13	
56 hours' labor @ 36c.	20 16	
Plus 15 per cent on		
\$32.79	4 92	
93 bags cement @ 65c.	60 45	
280 cubic feet sand at 6½c.	18 20	
9 tons pebbles @ \$3.50	31 50	
Extra work — Remove the artificial stone driveways at Adams terrace and relay with granite block and flagging.		
7 hours, foreman, @ 75c.	5 25	
8 hours, paver, @ 81½c.	6 50	
3 hours, finisher, @ 70c.	2 10	
3 hours, helper, @ 45c.	1 35	
48 hours' labor @ 39c.	18 72	
Plus 15 per cent on		
\$33.92	5 09	
12 hours, single team, @ 62½c.	7 50	
147 cubic feet sand @ 6½c.	9 56	
6 bags cement @ 65c.	3 90	
1 pound lamp black @ 40c.,	40	
<i>Carried forward</i>	\$10,877 09	\$150 74

<i>Brought forward</i>	\$10,877 09	\$150 74	
Extra work — Grade approaches at Fairview street and Elm-dale circle.			
9 hours, foreman, @ 75c.	6 75		
73 hours, labor @ 36c.	26 28		
Plus 15 per cent on \$33.03	4 95		
12 hours, double team, @ 87½c.	10 50		
	<u>\$10,916 57</u>		
Less amount paid in 1917	8,457 08		
		<u>2,459 49</u>	
			<u><u>\$2,610 23</u></u>
<i>Ainsley street, from Rosemont street southerly.</i>			
Final payment on contract of D. M. Biggs & Co. for 382 square feet artificial stone sidewalks relaid, being amount retained			<u>\$11 03</u>
<i>Amherst street, from Belgrade avenue to Penfield street. (Work not started.)</i>			
Engineering			<u>\$4 48</u>
<i>Amory street, from Boylston street to Green street. Length, 2,432 linear feet. Area, 16,904 square feet. Edgestone reset, granite block gutters laid and artificial stone sidewalks constructed.</i>			
Engineering	\$3 26		
Engineering expense	20		
Amount paid to Warren Brothers Company, under contract:			
1½ cubic yards rock excavation @ \$10	\$17 50		
47 linear feet circular edgestone set @ 30c.	14 10		
1,983 linear feet existing edgestone reset @ 21c.	416 43		
752 square yards granite block paving hauled and laid, gravel joints, @ 90c.	676 80		
69 square yards existing granite block paving relaid, gravel joints, @ 75c.	51 75		
16,066 square feet artificial stone sidewalks furnished and laid @ 20c.	3,213 20		
838 square feet artificial stone driveways furnished and laid @ 24c.	201 12		
3 covers reset @ \$3	9 00		
	<u>\$4,599 90</u>		
Less amount paid in 1917,	3,484 15		
	<u>\$1,115 75</u>		
Less amount retained	75 00		
		<u>1,040 75</u>	
			<u><u>\$1,080 21</u></u>

Auckland street, from Belfort street 51 feet southerly. Length, 51 linear feet. Area, 328 square feet. Edgestone reset, gutters repaved and artificial stone sidewalks constructed. (Work done in 1917.) Final payment on contract.

Amount paid to D. M. Biggs, under contract:

52 linear feet straight edgestone and corners hauled and set @ 30c.	\$15 60		
19 square yards granite block paving hauled and laid @ \$1	19 00		
328 square feet artificial stone sidewalks furnished and laid @ 18c.	59 04		
	<u>\$93 64</u>		
Less amount paid in 1917,	<u>82 99</u>		
		<u>\$10 65</u>	<u>\$10 65</u>

Work completed November 17, 1917.

Beech street, from West Roxbury Parkway to Robson street. (Work not started.)

Engineering	\$6 00		
Engineering expense	10		
Edgestone, 80 feet 5 inches circular	<u>104 54</u>		
			<u>\$110 64</u>

Belfort street, from Dorchester avenue to Sagamore street. Length, 552 linear feet. Area, 6,412 square feet. Edgestone set, granite block gutters laid and artificial stone sidewalks and driveways constructed.

Engineering	\$2 24		
Engineering expense	10		
Amount paid to D. M. Biggs, under contract:			
Removing trees, etc.	\$50 00		
5 cubic yards water box excavation @ \$5	25 00		
80 linear feet straight edgestone and corners hauled and set @ 30c.	24 00		
29 linear feet circular edgestone set @ 29c.	8 41		
479 linear feet existing edgestone reset @ 18c.	86 22		
192 square yards granite block paving hauled and laid @ \$1	192 00		
98 square yards existing granite block paving relaid @ 50c.	49 00		
18 square yards existing brick sidewalks relaid @ 50c.,	9 00		
6,412 square feet artificial stone sidewalks furnished and laid @ 18c.	1,154 16		
Extra work — Remove trees on south side of street.			
9 hours, foreman, @ 71c.	6 75		
Carried forward	<u>\$1,604 54</u>	<u>\$2 34</u>	

<i>Brought forward</i>	\$1,604 54	\$2 34
72 hours' labor @ 39c.	28 08	
Plus 15 per cent on \$34.83,	5 22	
8 hours, auto truck, @ \$3.50,	28 00	
	<u>\$1,665 84</u>	
Less amount paid in 1917,	<u>1,288 54</u>	
		<u>377 30</u>
		<u><u>\$379 64</u></u>
<i>Belvidere street</i> , from Massachusetts avenue to Dalton street. (Work done in 1917.)		
Engineering expense		<u>\$0 10</u>
<i>Brooks street</i> , from Faneuil street to Hobart street. (Work not started.)		
Engineering		<u>\$6 00</u>
<i>Brookside avenue</i> , from Boylston street to Green street. Length, 2,041 linear feet. Area, 20,320 square feet. Edgestone reset, granite block gutters laid and artificial stone sidewalks constructed.		
Engineering	\$251 99	
Engineering expense	3 40	
Inspection	85 25	
Edgestone	161 83	
Blocks	40 00	
	<u>\$542 47</u>	
Credit: 3,850 old bricks	26 95	
	<u>\$515 52</u>	
Amount paid to Warren Brothers Company, under contract:		
3 cubic yards rock excavation @ \$10	\$30 00	
2,318 linear feet straight edgestone and corners hauled and set @ 35c.	811 30	
109 linear feet circular edgestone set @ 30c.	32 70	
789 linear feet existing edgestone reset @ 21c.	165 69	
858 square yards granite block paving hauled and laid, gravel joints, @ 90c.	772 20	
291 square yards existing granite block paving relaid, gravel joints, @ 75c.	218 25	
5 square yards existing flagging crosswalks relaid @ 75c.	3 75	
7 square yards existing brick sidewalks relaid @ 30c.	2 10	
19,403 square feet artificial stone sidewalks furnished and laid @ 20c.	3,880 60	
	<u>\$5,916 59</u>	
Carried forward		<u>\$515 52</u>

<i>Brought forward</i>	\$5,916 59	\$515 52
917 square feet artificial stone driveways furnished and laid @ 24c.	220 08	
3 covers reset @ \$3	9 00	
	<hr/>	
	\$6,145 67	
Less amount paid in 1917,	785 40	
	<hr/>	
	\$5,360 27	
Less amount retained	37 50	
	<hr/>	
	5,322 77	
		<hr/>
		\$5,838 29

Brown avenue, from Poplar street to Blakemore street. Length, 2,311 linear feet. Area, 24,712 square yards. Reset edgestone, granite block gutters repaved, and artificial stone sidewalks constructed.

Engineering	\$92 29
Engineering expense	1 20
Inspection	103 09
Amount paid to Charles J. Jacob, under contract:	
Removing trees, bushes, etc.	\$100 00
4 cubic yards rock excavation @ \$10	40 00
63 linear feet straight edgestone and corners hauled and set @ 30c.	18 90
89 linear feet circular edgestone set @ 20c	17 80
2,593 linear feet existing edgestone reset @ 18c.	466 74
523 crushed stone and concrete foundations furnished and laid @ 20c.	104 60
1,018 square yards existing granite block paving relaid @ 50c.	509 00
52 square yards existing flagging crosswalks relaid @ 50c.	26 00
24,279 square feet artificial stone sidewalks furnished and laid @ 18c.	4,370 22
433 square feet artificial stone driveways furnished and laid @ 35c.	151 55
1 cover reset @ \$3	3 00
Extra work — Remove edgestone already set and construct driveways as directed:	
2½ days, foreman, @ \$5.50,	13 75
2½ days, paver, @ \$6	13 50
1 day, rammer, @ \$3.50	3 50
2½ days, stone cutter, @ \$6,	15 00
14½ days' labor @ \$3.40	49 73
Plus 15 per cent on \$95.48	14 32
1½ days, double team, @ \$7,	10 50
	<hr/>
<i>Carried forward</i>	\$5,828 21
	<hr/>
	\$196 58

<i>Brought forward</i>	\$5,828 21	\$196 58
Extra work — Repair top of stone wall to allow construction of artificial sidewalk. Repairing stone wall	15 00	
Extra Work — Remove tree at No. 12 not shown on schedule:	30 00	
Tree removed	6 19	
1½ days, foreman, @ \$5.50,	27 20	
8 days' labor @ \$3.40	5 01	
Plus 15 per cent on \$33.39	990 00	
Extra work — Removing twenty-four trees and stumps		
Extra work — Furnish stone cutter and laborer to make closures in edgestone where trees were removed:		
2 days, stone cutter, @ \$6,	12 00	
3 days' labor @ \$3.40	10 20	
Plus 15 per cent on \$22.20	3 33	
Extra work — Remove concrete above grade at posts of fence corner, Ashland street:		
5 hours' labor @ 42½c.	2 13	
Plus 15 per cent on \$2.13,	32	
Extra work — Remove tree near Poplar street which has blown down; also remove buried stumps not shown on schedule:		
6½ days' labor @ \$3.40	22 53	
Plus 15 per cent on \$22.53	3 38	
1½ days, double team, @ \$7,	8 75	
Extra work — Relocate edgestone between Allen and Rowe streets:		
21½ hours, foreman, @ 66½c.,	14 33	
207 hours' labor @ 40c.	82 80	
Plus 15 per cent on \$97.13	14 57	
2 days, double team, @ \$7,	14 00	
Extra work — Remove large corners where new circular edgestone is to be set:		
19 hours' labor @ 40c.	7 60	
Plus 15 per cent on \$7.60,	1 14	
	<hr/>	
	\$7,198 59	
Less amount paid in 1917	5,054 53	
	<hr/>	
		2,144 06
		<hr/>
		<u>\$2,340 64</u>

Cleveland place, from Margaret street to Snow Hill street. Length, 255 linear feet. Area, 32,600 square feet. Artificial stone driveway constructed.

Engineering	\$49 52	
Engineering expense	25	
Inspection	129 86	
Edgestone, 1 second-hand corner	2 00	
Amount paid to V. Grande, under contract:		
3 linear feet straight edge-stone and corners hauled and set @ 50c.	\$1 50	
22 linear feet existing edge-stone reset @ 35c.	7 70	
15 square yards existing granite block paving relaid, gravel joints, @ \$1	15 00	
5 square yards existing brick sidewalks relaid @ \$1	5 00	
3,260 square feet artificial stone driveways furnished and laid @ 35c.	1,141 00	
2 covers reset @ \$3	6 00	
Extra work — Furnish labor and stone-cutter to dress foundations as required:		
16 hours' labor @ 42½c.	6 80	
3 hours, stonecutter, @ 65c.	1 95	
Plus 15 per cent on \$8.75	1 31	
Allowance for delay under Article 8 of contract, on account of street being occupied by gas company:		
60 hours, watchman, @ 40c.,	24 00	
Plus 15 per cent on \$24	3 60	
	<hr/>	
	1,213 86	
	<hr/>	
		<u>\$1,395 49</u>

Dix street, from Adams street, 120 feet westerly. Final payment on contract of D. M. Biggs & Co. for work done in 1917, constructing artificial stone sidewalks \$34 14

Dorchester avenue, from Park street to Peabody square. Length, 4,535 linear feet. Area, 26,783 square feet. Edgestone set, granite block gutters laid and artificial stone sidewalks and driveways constructed. Unfinished work from 1917.

Engineering	\$55 50	
Engineering expense	05	
Amount paid to D. M. Biggs, under contract:		
Removing trees, bushes, etc.	\$100 00	
29 linear feet circular edge-stone set @ 29c.	8 41	
	<hr/>	
<i>Carried forward</i>	\$108 41	\$55 55

<i>Brought forward</i>	\$108 41	\$55 55
3,164 linear feet existing edge-stone reset @ 18c.	569 52	
1,176 square yards existing granite block paving relaid @ 50c.	588 00	
28 square yards existing flagging crosswalks relaid @ 90c.	25 20	
3 square yards existing brick sidewalks relaid @ 50c.	1 50	
25,787 square feet artificial stone sidewalks furnished and laid @ 18c.	4,641 66	
996 square feet artificial stone driveways furnished and laid @ 18c.,	179 28	
3 covers reset @ \$3	9 00	
Extra work — Haul surplus sidewalk bricks to Beacon street:		
7 hours, auto truck @ \$3.50	24 50	
Extra work — Replace the driveway at No. 1807:		
2 hours, paver, @ 81½c.	1 63	
9 hours' labor @ 39c.	3 51	
Plus 15 per cent on \$5.14,	77	
	<hr/> \$6,152 98	
Less amount paid in 1917,	<hr/> 5,112 42	
	<hr/> 1,040 56	
		<hr/> <u>\$1,096 11</u>

Dorchester avenue, from Freeport street to Park street. Length, 3,262 linear feet. Area, 43,604 square feet. Artificial stone sidewalks and driveways constructed. Edgestone reset. (Work done in 1917.) (Final payment in 1918.)

Engineering	\$5 83
Amount paid to Warren Brothers Company, under contract:	
Removing trees, etc.	\$10 00
11 linear feet circular edge-stone set @ 23c.	2 53
4,585 linear feet existing edge-stone set @ 19c.	871 15
1,252 square yards existing granite block paving relaid @ 60c.	751 20
41,927 square feet artificial stone sidewalks furnished and laid @ 18c.	7,546 86
1,677 square feet artificial stone driveways furnished and laid @ 22c.	368 94
1 cover reset @ \$3	3 00
	<hr/> \$9,553 68
<i>Carried forward</i>	\$5 83

<i>Brought forward</i>	\$9,553 68	\$5 83
Extra work — Remove tree stump found beneath the surface of the sidewalk on west side, between East and Hecla streets:		
32 hours' labor @ 45c.	14 40	
Plus 15 per cent on \$14.40,	2 16	
1 hours, double team, @ 87½c.	3 50	
Extra work — Remove the large corner from the northerly corner of Hecla street and replace with circular edgestone:		
13 hours, paver, @ 75c.	9 75	
9 hours, stone cutter, @ 75c.	6 75	
14 hours' labor @ 45c.	6 30	
Plus 15 per cent on \$22.80	3 42	
Extra work — Replace damaged artificial surface at Nos. 1464 and 1434.		
16 hours, finisher, @ 75c.	12 00	
40 hours' labor @ 45c.	18 00	
Plus 15 per cent on \$30	4 50	
1 double load sand @ \$5	5 00	
16 bags cement @ 65c.	10 40	
	<u>\$9,649 86</u>	
Less amount paid in 1917,	<u>8,109 58</u>	
		<u>1,540 28</u>
		<u><u>\$1,546 11</u></u>

Edison Green, at No. 6.

Final payment, under contract with D. M. Biggs & Co., for constructing artificial stone sidewalks for work done in 1917 \$10 06

Evergreen street (westerly side), from South Huntington avenue to Day street. Length, 847 linear feet. Area, 5,119 square feet. Edgestone reset, granite block gutters laid and artificial stone sidewalks constructed.

Engineering	\$42 38
Engineering expense	1 54
Inspection	134 48
Edgestone, 214 feet 9 inches straight and 4 small corners	274 45
Blocks, 3,000 old granite	60 00
	<u>\$512 85</u>
Credit: Bricks, 800 old	5 60
	<u>\$507 25</u>
Amount paid to Warren Brothers Company, under contract:	
2 cubic yards rock excavation @ \$10	\$20 00
<i>Carried forward</i>	<u>\$20 00</u>
	<u>\$507 25</u>

<i>Brought forward</i>	\$20 00	\$507 25
245 linear feet straight edge-stone and corners hauled and set @ 35c.	85 75	
293 linear feet existing edge-stone reset @ 21c.	61 53	
86 square yards granite block paving hauled and laid, gravel joints, @ 90c.	77 40	
100 square yards existing granite block paving relaid, gravel joints, @ 75c.	75 00	
4 square yards existing flagging crosswalks relaid @ 75c.	3 00	
5,062 square feet artificial stone sidewalks furnished and laid @ 20c.	1,012 40	
57 square feet artificial stone driveways furnished and laid @ 24c.	13 68	
1 cover reset @ \$3	3 00	
	<u>\$1,351 76</u>	
Less amount retained	37 50	
		<u>1,314 26</u>
		<u><u>\$1,821 51</u></u>

Fairbanks street, from Faneuil street to Washington street. (Work not started.)

Engineering \$0 00

Hanover street, from Court street to Commercial street. Length, 3,309 linear feet. Area, 33,524 square feet. Edgestone reset, granite block paving relaid and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$67 76
Inspection	67 65
Amount paid to V. Grande, under contract:	
Removing trees, etc.	\$10 00
15 cubic yards water box excavation @ \$5	75 00
17 linear feet circular edge-stone set @ 50c.	8 50
1,796 linear feet existing edge-stone reset @ 35c.	628 60
200 square yards concrete base furnished and laid @ \$1.25	250 00
243 square yards existing granite block paving relaid, gravel joints, @ \$1	243 00
21 square yards existing brick sidewalks relaid @ \$1	21 00
33,233 square feet artificial stone sidewalks furnished and laid @ 18c.,	5,981 94
<i>Carried forward</i>	<u>\$7,218 04</u>
	\$135 45

<i>Brought forward</i>	\$7,218 04	\$135 41
291 square feet artificial stone driveways furnished and laid @ 35c.	101 85	
2 covers reset @ \$3	6 00	
Extra work — Cut concrete at subway wall and remove and cut existing edgestone as directed:		
2 hours, mason, @ 75c.	1 50	
17 hours, stonecutter, @ 65c.	11 05	
20 hours' labor @ 40c.	8 00	
Plus 15 per cent on \$20.55,	3 08	
Extra work — Reset Bradley head catch-basin near easterly corner of Commercial street; Bradley head catch-basin reset	5 00	
	<u>\$7,354 52</u>	
Less amount paid in 1917	<u>4,689 45</u>	
	2,665 07	<u>\$2,800 48</u>
<i>Holbrook street</i> , from Centre street to Dane street. (Work not started.)		
Engineering		<u>\$14 93</u>
<i>Holton street</i> , from Everett street to Franklin street. (Work not started.)		
Engineering		<u>\$6 00</u>
<i>Hyde Park avenue</i> , west side, from Tower street to Walk Hill street. (Work done in 1917.)		
Engineering		\$5 44
Amount paid to Warren Brothers Company, under contract:		
Cost of work done	\$3,460 10	
Amount paid in 1917, \$2,941 09		
Amount retained 37 50		
	<u>2,978 59</u>	
	481 51	
Amount paid in 1918		<u>\$486 95</u>
<i>King street</i> , from Neponset avenue to Adams street. Length, 1,376 linear feet. Area, 5,736 square feet. Edgestone set, granite block gutters laid and artificial stone sidewalks and driveways constructed.		
Engineering		\$12 35
Inspection		50
Amount paid to D. M. Biggs, under contract:		
Removing trees, bushes, etc.	\$15 00	
20 cubic yards water box excavation @ \$5	100 00	
2.6 cubic yards rock excavation @ \$10	26 00	
	<u>\$141 00</u>	
<i>Carried forward</i>	\$12 85	

<i>Brought forward</i>	\$141 00	\$12 85
907 linear feet straight edge-stone and corners hauled and set @ 30c.	272 00	
38 linear feet circular edge-stone set @ 29c.	11 02	
31 linear feet existing edge-stone reset @ 18c.	5 58	
478 linear feet crushed stone and concrete foundation furnished and placed @ 35c.	167 30	
322 square yards granite block paving hauled and laid @ \$1	322 00	
21 square yards existing granite block paving relaid @ 50c.	10 50	
5,616 square feet artificial stone sidewalks furnished and laid @ 18c.	1,010 88	
382 square feet artificial stone sidewalks furnished and laid unfinished @ 12c.	45 84	
120 square feet artificial stone driveways @ 18c.	21 60	
4 covers reset @ \$3	12 00	
1 dry well @ \$10	10 00	
Extra work — Build a drain to connect the edgestone trench on north side of street with surface sewer in the street:		
22 hours, foreman, @ 75c.	16 50	
91 hours, labor @ 39c.	35 49	
Plus 15 per cent on \$51.99,	7 80	
7 hours, double team, @ 87½c.	6 13	
1 bag cement @ 65c.	65	
14 feet 6-inch drain pipe @ 45c.	6 30	
1 12-inch by 6-inch Y-pipe @ \$5.40	5 40	
Extra work — Remove the artificial stone driveways at Abbotsford terrace, and relay with flagging and paving block:		
6 hours, foreman, @ 75c.	4 50	
8 hours, paver, @ 81½c.	6 50	
3½ hours, finisher, @ 70c.	2 45	
3½ hours, helper, @ 45c.	1 58	
27½ hours, labor @ 39c.	10 73	
Plus 15 per cent on \$25.75,	3 86	
1 pound lamp black @ 40c.,	40	
120 cubic feet gravel @ 6½c.	7 80	
4 bags cement @ 65c.	2 60	
<i>Carried forward</i>	\$2,148 51	\$12 85

<i>Brought forward</i>	\$2,148 51	\$12 85
Extra work — Excavate the material above grade:		
63 cubic yards extra excavation @ \$1	63 00	
	<u>\$2,211 51</u>	
Less amount paid in 1917,	<u>1,547 39</u>	
		<u>664 12</u>
		<u>\$676 97</u>
<i>Lamarline street</i> , from Boylston street to Green street. Work done in 1917.		
Cost of work done by Warren Brothers Company, under contract	\$6,094 62	
Amount paid in 1917	<u>5,098 73</u>	
		<u>\$997 89</u>
Amount retained	37 50	
		<u>\$960 39</u>
<i>Mapleton street</i> , from Murdock street to Market street. (Work not started.)		
Engineering		<u>\$2 00</u>
<i>Market street</i> (east side), from Sparhawk street to Mapleton street. (Work not started.)		
Engineering		<u>\$2 00</u>
<i>Neponset avenue</i> , from King street to Boutwell street. Length, 1,200 linear feet. Area, 9,460 square feet. Edgestone set, granite block gutters laid and artificial stone sidewalks and driveways constructed. (Work done in 1917.) Final payment in 1918. Began July 23, 1917. Completed September 27, 1917.		
Engineering	\$2 72	
Engineering expense	20	
Amount paid to D. M. Biggs, under contract:		
Removing trees, bushes, etc.	\$20 00	
14 cubic yards water-box excavation @ \$5	70 00	
0.7 cubic yards rock excavation @ \$10	7 00	
13 linear feet circular edgestone set @ 29c.	3 77	
978 linear feet existing edgestone reset @ 18c.	176 04	
367 square yards existing granite block paving relaid @ 50c.	183 50	
22 square yards existing flagging crosswalks relaid @ 90c.	19 80	
8,914 square feet artificial stone sidewalks furnished and laid @ 18c.	1,604 52	
546 square feet artificial stone driveways furnished and laid @ 18c.	98 28	
	<u>\$2,182 91</u>	
<i>Carried forward</i>		<u>\$2 92</u>

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<i>Brought forward</i>	\$2,182 91	\$2 92	.
3 covers reset @ \$3	9 00		
Extra work — Remove two trees:			
Removing two trees	50 00		
Extra work — Rebuild catch-basin at corner of South Munroe terrace and at No. 147:			
9 hours, mason, @ 65c.	5 85		
9 hours, tender, @ 36c.	3 24		
Plus 15 per cent on \$9.09,	1 36		
155 brick @ \$15 M.	2 33		
5 bags cement @ 65c.	3 25		
Extra work — Grade approaches at South Munroe terrace and Clayton terrace:			
14 hours, foreman, @ 75c.	10 50		
3 hours, finisher, @ 70c.	2 10		
55 hours' labor @ 36c.	19 80		
Plus 15 per cent on \$32.40,	4 86		
9 hours, double team, @ 87½c.	7 88		
4 hours, single team, @ 62½c.,	2 50		
6 bags cement @ 65c.	3 90		
27 cubic feet sand @ 6½c.	1 76		
1 pound lamp black @ 40c.,	40		
Extra work — Remove three trees between Nos. 135-145:			
12½ hours, foreman, @ 75c.	9 38		
180 hours' labor @ 36c.	64 80		
Plus 15 per cent on \$74.18,	11 13		
9 hours, double team, @ 87½c.	7 88		
9 hours auto truck @ \$3.50,	31 50		
	<u>\$2,436 33</u>		
Less amount paid in 1917,	<u>1,785 29</u>		
		651 04	
		<u>\$653 96</u>	

Norfolk avenue (west side), from Shirley street to Burrell street.

Engineering	\$5 00	
Engineering expense	10	
	<u>\$5 10</u>	

Park street (north side), from Clayton street to Adams street. (Work done in 1917.)

Engineering	\$7 95	
Final payment to D. M. Biggs & Co. for work done under contract in 1917	207 52	
	<u>\$215 47</u>	

Paul Gore street (north side), from No. 12 to Chestnut avenue. Length, 1,350 linear feet. Area, 8,214 square yards. Edgestone reset, granite block gutters laid and artificial stone sidewalks constructed. Work done in 1917.

Engineering		\$14 59	
Engineering expense		15	
Amount paid to Warren Brothers Company, under contract:			
8 cubic yards water-box ex- cavation @ \$2	\$16 00		
12 cubic yards rock excava- tion @ \$10	120 00		
847 linear feet straight edge- stone and corners hauled and set @ 35c.	296 45		
48 linear feet circular edge- stone set @ 30c.	14 40		
455 linear feet existing edge- stone reset @ 21c.	95 55		
334 square yards granite block paving hauled and laid, gravel joints, @ 90c.	300 60		
153 square yards existing gran- ite block paving relaid, gravel joints, @ 75c	114 75		
8,103 square feet artificial stone sidewalks furnished and laid @ 20c.	1,620 60		
111 square feet artificial stone driveways furnished and laid @ 24c.	26 64		
	<hr/>	\$2,694 99	
Less amount paid in 1917,		1,990 44	
		<hr/>	
		\$614 55	
Amount retained		37 50	
		<hr/>	
		577 05	
		<hr/>	
		\$591 79	

Richmond street (north side), from Adams street to Dorchester avenue.
Length, 1,620 linear feet. Area, 4,680 square feet. Edgestone reset,
gutters repaved and artificial stone sidewalks constructed. Work
done in 1917. Final payment in 1918.

Engineering		\$24 42	
Amount paid to Warren Brothers Company, under contract:			
Removing trees, etc.	\$20 00		
5 cubic yards rock excava- tion @ \$6	30 00		
14 linear feet straight edge- stone hauled and set @ 30c.	4 20		
1,549 linear feet existing edge- stone reset @ 19c.	294 31		
537 square yards exist ing granite block paving re- laid @ 60c.	322 20		
8,185 square feet artificial stone sidewalks furnished and laid @ 18c.	1,473 30		
805 square feet artificial stone driveways furnished and laid @ 22c.	177 10		
	<hr/>	\$2,321 11	
Carried forward		\$24 42	

<i>Brought forward</i>	\$2,321 11	\$24 42
2 covers reset @ \$3	6 00	
Extra work — Remove the existing edgestone for new driveways and trim the edgestone for semi-depressed driveways where directed:		
60 hours, stonecutter, @ 75c.,	45 00	
14 hours, edgestone setter, @ 75c.	10 50	
10 hours, helper, @ 60c.	6 00	
34 hours labor @ 45c.	15 30	
Plus 15 per cent on \$76.80,	11 52	
	<hr/>	
	\$2,415 43	
Less amount paid in 1917,	1,624 35	
	<hr/>	
		791 08
		<hr/>
		<u>\$815 50</u>

Ridge street, from Brown avenue to Sycamore street. Length, 740 linear feet. Area, 7,548 square feet. Edgestone reset, granite block gutter repaved and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$43 40
Engineering expense	1 04
Inspection	18 30
Edgestone, 301 feet straight	216 72
Amount paid to Charles J. Jacobs, under contract:	
1,300 linear feet straight edgestone and corners hauled and set @ 30c.	\$390 00
57 linear feet circular edgestone set @ 20c.	11 40
130 linear feet crushed stone and concrete foundation furnished and placed @ 20c.	26 00
75 linear feet existing edgestone reset @ 18c.	13 50
451 square yards granite block paving hauled and laid @ 85c.	383 35
16 square yards existing granite block paving relaid @ 50c.	8 00
7,248 square feet artificial stone sidewalks furnished and laid @ 18c.	1,304 64
300 square feet artificial stone driveways furnished and laid @ 35c.	105 00
Extra work — Remove edgestone and construct driveways, where directed:	
4½ hours, stonecutter, @ 75c.	3 38
1½ hours, edgestone setter, @ 75c.	1 13
	<hr/>
<i>Carried forward</i>	\$2,246 40
	<hr/>
	\$279 46

<i>Brought forward</i>	\$2,246 40	\$279 46
2½ hours, edgestone setter, @ 87½c.	2 19	
6½ hours' labor @ 42½c.	2 76	
4 hours' labor @ 50c.	2 00	
Plus 15 per cent on \$11.46,	1 72	
1½ days, double team, @ \$7	9 63	
½ day, double team, @ \$8	4 00	
1 bag cement @ 80c.	80	
	<u>\$2,269 50</u>	
Less amount paid in 1917,	1,273 81	
		<u>995 69</u>
		<u><u>\$1,275 15</u></u>

Rockwell street (north side), from Washington street to Milton avenue and south side from Milton avenue, 190 feet easterly. (Work not started.)

Engineering	\$5 00	
Engineering expense	28	
		<u>\$5 28</u>

Rosemont street, from Adams street to Gustine street. Length, 385 linear feet. Area, 4,647 square feet. Edgestone set, granite block gutters laid and artificial stone sidewalks and driveways constructed. (Work done in 1917.) Final payment in 1918.

Engineering	\$6 00	
Amount paid to D. M. Biggs, under contract:		
Removing trees, etc.	\$15 00	
6 linear feet straight edgestone and corners hauled and set @ 30c.,	1 80	
433 linear feet existing edgestone reset @ 18c.	77 94	
225 linear feet crushed stone and concrete foundation furnished and placed @ 35c.	78 75	
136 square yards existing granite block paving re-laid @ 50c.	68 00	
4,589 square feet artificial stone sidewalks furnished and laid @ 18c.	826 02	
58 square feet artificial stone driveways furnished and laid @ 18c.	10 44	
1 cover reset @ \$3	3 00	
	<u>\$1,080 95</u>	
Less amount paid in 1917,	900 49	
		<u>180 46</u>
		<u><u>\$186 46</u></u>

Scotia street, from St. Cecilia street to Dalton street. (Work done in 1917.)

Engineering	\$3 00	
Engineering expense	10	
		<u>\$3 10</u>

Seymour street, from Brown avenue to Canterbury street. (Work done in 1917.)

Engineering	\$63 76	
Inspection	48 10	
Engineering expense	39	
Amount of contract with Charles J. Jacobs Company	\$2,659 00	
Amount paid in 1917	2,187 05	
	<hr/>	471 95
		<u>\$584 20</u>

Sherwood street, from Ashland street to Florence street. Length, 1,561 linear feet. Area, 14,705 square feet. Reset edgestone, granite block gutters laid and artificial stone sidewalks constructed.

Engineering	\$29 85
Inspection	23 24
Edgestone, 442 feet, 10 inches straight	318 78
Amount paid to Charles J. Jacobs, under contract:	

12½ cubic yards water-box excavation @ \$2	\$25 00
20½ cubic yards rock excavation @ \$10	205 00
2,959 linear feet straight edgestone and corners hauled and set @ 30c.	887 70
143 linear feet circular edgestone set @ 20c.	28 60
5 linear feet existing edgestone reset @ 18c.	90
1,490 linear feet crushed stone and concrete foundation furnished and laid @ 20c	298 00
1,077 square yards granite block paving hauled and laid @ 85c.	915 45
7 square yards existing flagging crosswalks relaid @ 50c.	3 50
14,351 square feet artificial stone sidewalks furnished and laid @ 18c.	2,583 18
254 square feet artificial stone driveways furnished and laid @ 35c.	88 90
1 cover reset @ \$3	3 00
Extra work — Furnish stonecutter to joints, edgestone where directed:	
1½ days, stonecutter, @ \$6, Plus 15 per cent on \$9, Extra work — Remove buried stump not shown on plan:	9 00
	1 35
8 hours' labor @ 42½c.	3 40
Plus 15 per cent on \$3.40, Extra work — Reset edgestone and relay gutter where directed on account of change in grade:	51

Carried forward	<hr/> \$5,053 49	<hr/> \$371 87
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<i>Brought forward</i>	\$5,053 49	\$371 87
3½ days, foreman, @ \$5.50,	18 56	
½ day, subforeman, @ \$4.50,	2 25	
3½ days, paver, @ \$6	18 75	
3 days, rammer, @ \$3.50,	10 50	
20½ days' labor @ \$3.40	69 28	
Plus 15 per cent on		
\$119.34	17 90	
1 day, double team, @ \$7,	7 00	
6 tons crushed stone @		
\$1.75	10 50	
1 double load gravel @		
\$2.50	2 50	
3 bags cement @ 65c.	1 95	
1½ gallons kerosene @ 16c.,	24	
Extra work — Construct		
additional driveways		
as directed:		
9 hours, stonecutter, @		
75c.	6 75	
Plus 15 per cent on \$6.75,	1 01	
½ day, double team, @ \$7,	2 00	
	\$5,222 68	
Less amount paid in 1917,	4,081 70	
		1,140 98
		<u>\$1,512 85</u>

Shirley street, south side, from Clifton street to Norfolk avenue. (Work done in 1917.)

Engineering	\$5 00
Engineering expense	10
	<u>\$5 10</u>

Sycamore street, from Florence street to Ashland street. Length, 1,263 linear feet. Area, 17,228 square feet. Reset edgestone, granite block gutters repaved, and artificial stone sidewalks constructed. Unfinished work from 1917.

Engineering	\$129 23
Engineering expense	4 42
Inspection	357 87
Edgestone, 1,070 feet straight and 16 small corners	1,185 05
Blocks: 16,000 second hand	320 00
Amount paid to Charles J. Jacobs, under contract:	
6 cubic yards water box excavation @ \$2	\$12 00
1 cubic yard rock excavation @ \$10	10 00
2,470 linear feet straight edgestone and corners hauled and set @ 30c.,	741 00
64 linear feet circular edgestone set @ 20c.	12 80
22 linear feet existing edgestone reset @ 18c.	3 96
466 linear feet crushed stone and concrete foundation furnished and laid @ 20c.	93 20
Carried forward	\$872 96
	<u>\$1,996 57</u>

<i>Brought forward</i>	\$872 96	\$1,996 57
918 square yards granite block paving hauled and laid @ 85c. . . .	780 30	
10 square yards existing granite block paving relaid @ 50c. . . .	5 00	
1 square yard existing flagging crosswalks relaid @ 50c. . . .	50	
16,189 square feet artificial stone sidewalks furnished and laid @ 18c. . . .	2,914 02	
1,049 square feet artificial stone driveways furnished and laid @ 35c. . . .	367 15	
2 covers reset @ \$3 . . .	6 00	
Extra work — Construct driveways not shown on plan:		
2½ days, edgestone setter, @ \$7	17 50	
½ day's labor @ \$3.40 . . .	1 70	
9½ days' labor @ \$4 . . .	39 50	
Plus 15 per cent on \$58.70,	8 81	
7½ hours, auto truck, @ \$3,	22 50	
1½ days, double team, @ \$8,	12 00	
4½ hours, single team, @ 75c,	3 38	
1 bag cement @ 80c. . . .	80	
1 cubic foot sand @ 8c. . .	08	
200 pounds crushed stone @ \$3 per ton	30	
Extra work — Move fence and cap of wall at corner of Florence street back to line of street and place filling back of same, moving fence and cap of wall, etc. . . .	15 00	
Extra work — Haul edgestone which was delivered near Poplar street to its proper loca- tion:		
54 hour's labor @ 42½c. . .	22 95	
Plus 15 per cent on \$22.95,	3 44	
3 days, double team, @ \$7,	21 00	
	<hr/>	
	\$5,114 89	
Less two small corners delivered to contractor, @ \$3.65	7 30	
	<hr/>	
	\$5,107 59	
Less amount paid in 1917,	2,263 97	
	<hr/>	
	2,843 62	
	<hr/>	
	\$4,840 19	

Tower Street, from Hyde Park avenue to Forest Hills Cemetery. Work done in 1917.

Cost of work done in 1917, under contract with Warren Brothers Company	\$2,861 73	
Amount paid in 1917	2,432 47	
	<hr/>	\$429 26
Amount now retained		37 50
		<hr/>
		<u>\$391 76</u>

Walk Hill street, from Hyde Park avenue about 400 feet southerly (west side). Work done in 1917.

Cost of work done in 1917, under contract with Warren Brothers Company	\$582 11	
Amount paid in 1917	494 79	
	<hr/>	\$87 32
		<u> </u>

West Selden street, from Crossman street 2,100 feet easterly. Length, 2,100 linear feet. Area, 30,190 square feet. Edgestone reset, granite block gutters relaid, artificial stone sidewalks and two driveways constructed. (Work done in 1917.)

Engineering	\$10 77	
Engineering expense	20	
Amount paid to Warren Brothers Company, under contract:		
Removing trees, etc.	\$10 00	
24 cubic yards water box ex- cavation @ \$1.15	27 60	
13 linear feet straight edge- stoned hauled and set @ 30c.	3 90	
2,457 linear feet existing edge- stone reset @ 19c.	466 83	
650 square yards existing granite block paving relaid @ 60c.	390 00	
29,787 square feet artificial stone sidewalks furnished and laid @ 18c.	5,361 66	
403 linear feet artificial stone driveways furnished and laid @ 22c.	88 66	
9 covers reset @ \$3	27 00	
Extra work — Remove the existing edgestone and put in new drive- ways at Nos. 93, 125 and 192:		
20 hours, paver, @ 75c.	15 00	
28 hours' labor @ 45c.	12 60	
Plus 15 per cent on \$27.60	4 14	
4 hours, double team, @ 87½c.	3 50	
	<hr/>	\$6,410 89
Less amount paid in 1917,	5,407 64	
	<hr/>	1,003 25
		<u>\$1,014 22</u>

Westville street (north side), from Orchardale street to 205 feet east of Bowdoin street. (Work done in 1917.)

Engineering	\$4 72	
Cost of work done in 1917, under contract with Warren Brothers Company	\$622 11	
Amount paid in 1917	477 34	
	<u>144 77</u>	<u>\$149 49</u>

Westville street (south side), from Bowdoin street to Iowa street. (Work done in 1917.)

Amount paid for work done in 1917, under contract with Warren Brothers Company	\$179 34	
Amount paid in 1917	152 44	
	<u></u>	<u>\$26 90</u>

Wrentham street. (Work not done.)

Engineering	\$25 47	
Engineering expense	45	
	<u></u>	<u>\$25 92</u>

RECONSTRUCTION AND REPAIRING STREETS, BY CONTRACT.

Atlantic avenue, from Kneeland street to Summer street. Length, 1,182 linear feet. Area, 8,414 square yards. Edgestone reset, granite block pavement laid and artificial stone sidewalks constructed.

Engineering	\$1,356 40	
Engineering expense	4 91	
Inspection	579 62	
Advertising	5 25	
Labor, stonecutters	22 00	
Testing blocks	22 50	
Bricks	20 30	
Photographs	10 50	
Amount paid to Coleman Brothers, under contract:		
1,061 linear feet existing edgestone reset @ 30c.	\$318 30	
1,614 cubic yards concrete base furnished and laid @ \$12	19,368 00	
8,414 square yards granite block paving furnished and laid including, preparing site, cement sand bed and cement mortar under head of rails, grout joints, @ \$4.75	39,966 50	
1,326 square yards existing granite block paving and flagging crosswalks relaid, grout joints, @ \$2	2,652 00	
640 square yards brick sidewalks relaid @ 75c.	480 00	
3,704 square feet artificial stone sidewalks furnished and laid @ 35c.,	1,296 40	
<i>Carried forward</i>	<u>\$64,081 20</u>	<u>\$2,021 48</u>

<i>Brought forward</i>	\$64,081 20	\$2,021 48
21 covers reset @ \$3	63 00	
Extra work — Barring and ramming sewer trench:		
63 hours' labor @ 45c.	28 35	
Plus 15 per cent on \$28.35,	4 25	
	<hr/>	64,176 80
		<hr/> <u>\$66,198 28</u>

Atlantic avenue, from Summer street to Broad street. Length, 1,191 linear feet. Area, 4,521 square yards. Edgestone reset, granite block pavement relaid and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$1,361 87
Engineering expense	3 71
Inspection	906 67
Advertising	5 25
Labor, making templates	66 38
Labor, stonecutter	4 00
Testing blocks	22 50
Edgestone	16 65
	<hr/>
	\$2,387 03
Credit: Bricks, old sidewalk	67 20
	<hr/>
	\$2,319 83

Amount paid to B. E. Grant, under contract:

11 linear feet circular edge- stone set @ 40c.	\$4 40
1,191 linear feet existing edge- stone reset @ 25c.	297 75
674 cubic yards concrete base furnished and laid @ \$10.50	7,077 00
541 square yards existing granite block paving relaid, gravel joints, @ \$1	541 00
68 square yards existing brick sidewalks relaid @ 75c.	51 00
12,590 square feet artificial stone sidewalks fur- nished and laid @ 21c.,	2,643 90
Extra work — Omit the furnishing and laying of new granite block and substitute the relaying of existing granite block paving, including cleaning blocks, cement sand bed, etc.:	
4,521 square yards existing granite block paving relaid grout joints, @ \$2.75	12,432 75
	<hr/>
<i>Carried forward</i>	\$23,047 80
	<hr/>
	\$2,319 83

Brought forward \$23,047 80 \$2,319 83

Extra work — Haul
to Massachusetts ave-
nue lot all rejected
granite blocks and
flagging and haul from
Massachusetts avenue
lot to Atlantic avenue
all suitable blocks
required:

718 square yards blocks
and flagging hauled
to Massachusetts ave-
nue lot and suitable
blocks hauled to
Atlantic avenue @
50c.

359 00

\$23,406 80

Less amount retained 1,470 34

21,936 46

\$24,256 29

Atlantic avenue, from Broad street to South Market street. Length, 1,417 linear feet. Area, 10,014 square yards. Edgestone set, granite block pavement laid and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$1,192 61
Engineering expense	11 40
Inspection	1,256 81
Advertising	5 25
Labor, making templets	16 00
Labor, stonecutter	2 00
Testing blocks	22 50
Lumber	19 88
Edgestone	69 81

\$2,596 26

Credit: Blocks, old granite 217 60

\$2,378 66

Amount paid to Rossetti & Co., under contract:

46 linear feet straight edge- stone and corners hauled and set @ \$1	\$46 00
9 linear feet circular edge- stone set @ \$1	9 00
1,417 linear feet existing edge- stone reset @ 75c.	1,062 75
1,751 cubic yards concrete base furnished and laid @ \$10.15	17,772 65
973 square yards existing granite block paving relaid, gravel joints, @ \$2	1,946 00
10,014 square yards granite block paving furnished and laid, grout joints, @ \$5.20	52,072 80

Carried forward \$72,909 20 \$2,378 66

<i>Brought forward</i>	\$72,909 20	\$2,378 66
908 square yards existing granite block paving relaid, grout joints, @ \$1.75	1,589 00	
236 square yards existing brick sidewalks relaid @ 50c.	118 00	
6,555 square feet artificial stone sidewalks furnished and laid @ 14c.	917 70	
6 covers reset @ \$3	18 00	
11 courses of brickwork @ 50c.	5 50	
Extra work — Excavate and fill back of sea wall, as directed.		
7 hours, foreman, @ 75c.	5 25	
42 hours' labor @ 55c.	23 10	
4 hours, mason, @ 75c.	3 00	
Plus 15 per cent on \$31.35	4 70	
	<u>\$75,593 45</u>	
Less 5 per cent retained,	<u>3,779 67</u>	
	71,813 78	<u><u>\$74,192 44</u></u>

Atlantic avenue, from South Market street to Commercial street. Length, 1,061 linear feet. Area, 5,011 square yards. Edgestone reset, granite block pavement laid. (Work unfinished.)

Engineering	\$1,106 10
Engineering expense	6 81
Inspection	861 90
Advertising	5 25
Labor, making templets	12 00
Labor, stonemason	2 00
Edgestone	55 09
Blocks	167 22
Testing blocks	22 50
Amount paid to D'Onfro Brothers, under contract:	
24 linear feet circular edgestone set @ 60c.	\$14 40
1,061 linear feet existing edgestone reset @ 60c.	636 60
961 cubic yards concrete base furnished and laid @ \$10	9,610 00
2,508 square yards granite block paving relaid, gravel joints and bed, @ \$2	5,016 00
5,011 square yards granite block paving furnished and laid, grout joints, etc., @ \$4.85	24,303 35
569 square yards existing granite block paving relaid, grout joints, etc., @ \$2.50	1,422 50
<i>Carried forward</i>	<u>\$41,002 85</u>
	<u>\$2,238 87</u>

<i>Brought forward</i>	\$41,002 85	\$2,238 87
32 covers reset @ \$3	96 00	
19 courses of brick work @ 50c.	9 50	
	<u>\$41,108 35</u>	
Less amount retained, 5 per cent	2,055 42	
		<u>39,052 93</u>
		<u><u>\$41,291 80</u></u>

Broadway, from Washington street to Boston & Albany Railroad Bridge.
Length, 587 linear feet. Area, 2,314 square yards. Edgestone reset,
granite block gutters laid and artificial stone sidewalks constructed.

Engineering	\$865 28	
Engineering expense	11 75	
Inspection	443 53	
Advertising	10 85	
Labor, making templets	20 00	
Lumber	10 22	
Photographs	10 50	
Blocks, recut granite	3,327 75	
Teaming	3 00	
	<u>\$4,702 88</u>	
Credit: Bricks, old sidewalk	135 80	
	<u>\$4,567 08</u>	
Amount paid to James Doherty, under contract:		
981 linear feet existing edge-stone reset @ 28c.	\$274 68	
38 square yards existing granite blocks and flagging relaid, grout joints, @ \$3.35	127 30	
289 square yards brick sidewalks relaid @ 40c.	115 60	
* 7,483 square feet artificial stone sidewalks furnished and laid @ 23c.	1,721 09	
5 covers reset @ \$3	15 00	
Wood fence completed	234 00	
Extra work — Omit new granite blocks and substitute recut blocks, etc.:		
2,314 square yards recut granite blocks hauled and laid, grout joints, concrete base, etc., @ \$3.90	9,024 60	
Extra work — Cut concrete around Boston Elevated posts:		
9 hours' labor @ 50c.	4 50	
4 hours, stonecutter, @ 75c.,	3 00	
Plus 15 per cent on \$7.50,	1 13	
	<u>11,520 90</u>	
		<u><u>\$16,087 98</u></u>

* Decrease of six cents per square foot.

Causeway street, from Prince street to Washington Street North. (Work not started.)

Engineering	\$499 35	
Engineering expense	90	
Advertising	8 25	
		<u>\$508 50</u>

Centre street, from South street to Spring street. (Work not started.)

Engineering	<u>\$185 61</u>
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Commercial street, from Causeway street to Hanover street. Length, 1,821 linear feet. Area, 2,637 square yards. Edgestone reset, granite block pavement relaid and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$1,346 64	
Engineering expense	7 28	
Inspection	1,080 71	
Advertising	8 20	
Labor, stonecutter	32 00	
Blocks, old granite	1,040 00	
Edgestone	187 30	
		<u>\$3,702 13</u>
Credit: Bricks, old sidewalk	64 40	
		<u>\$3,637 73</u>

Amount paid to B. E. Grant, under contract:

132 linear feet straight edge-stone and corners hauled and set @ 50c.,	\$66 00	
19 linear feet circular edge-stone set @ 50c.	9 50	
1,821 linear feet existing edge-stone reset @ 30c.	546 30	
405 cubic yards concrete base furnished and laid @ \$10.50	4,252 50	
754 square yards existing granite block paving relaid, gravel joints, @ \$1.50	1,131 00	
140 square yards existing brick sidewalks relaid @ \$1	141 00	
11,263 square feet artificial stone sidewalks furnished and laid @ 24c.	2,703 12	
Extra work — Omit the furnishing and laying of new granite blocks and substitute the relaying of existing granite block paving:		
2,631 square yards granite blocks relaid @ \$2.75,	7,235 25	
<i>Carried forward</i>	<u>\$16,084 67</u>	<u>\$3,637 73</u>

<i>Brought forward</i>	\$16,084 67	\$3,637 73
Extra work — Return old granite blocks, barred up and hauled to Massachusetts avenue lot and haul to Massachusetts avenue lot all rejected granite blocks, etc.:		
1,896 square yards blocks hauled from Massachusetts avenue lot @ 50c.	948 00	
492 square yards blocks hauled to and from Massachusetts avenue lot @ 50c.	246 00	
	<hr/>	
	\$17,278 67	
Less 5 per cent retained,	863 93	
	<hr/>	
	\$16,414 74	
Amount not paid by Auditor	761 65	
	<hr/>	
	15,653 09	
	<hr/>	
		<u>\$19,290 82</u>

Congress street, from Atlantic avenue to Fort Point Channel. Length, 603 linear feet. Area, 4,235 square yards. Edgestone reset, granite block paving laid and artificial stone sidewalks constructed.

Engineering	\$400 68
Engineering expense	1 82
Inspection	230 38
Advertising	8 25
Labor, making templets	24 00
Lumber	10 50
Edgestone	158 92
Teaming	3 00
	<hr/>
	\$837 55
Credit: Bricks, old sidewalk	318 50
	<hr/>
	\$519 05

Amount paid to John E. Quinn, under contract:

109 linear feet circular edgestone set @ 50c.	\$54 50
948 linear feet existing edgestone reset @ 40c.	379 20
886 cubic yards concrete base furnished and laid @ \$10	8,860 00
282 square yards existing granite block paving re-laid with gravel joints @ \$1	282 00
4,235 square yards granite block paving furnished and laid, grout joints, cement sand bed, @ \$4.60,	19,481 00
	<hr/>
	\$29,056 70
<i>Carried forward</i>	\$519 05

<i>Brought forward</i>	\$29,056 70	\$519 05
130 square yards existing granite block paving relaid, grout joints, @ \$1.80	234 00	
52 square yards existing brick sidewalks relaid @ 50c.	26 00	
3,338 square feet artificial stone sidewalks furnished and laid @ 30c.	1,001 40	
5,198 square feet artificial stone sidewalks furnished and laid @ 24c.	1,247 52	
10 covers reset @\$3	30 00	
Extra work — Cutting out old concrete base:		
47 hours, foreman, @ 66½c.	31 33	
302 hours' labor @ 50c.	151 00	
Plus 15 per cent on \$182.33,	27 35	
	<hr/>	31,805 30
		<u>\$32,324 35</u>

Dorchester avenue, from Congress street to Summer street. Length, 321 linear feet. Area, 2,376 square yards. Granite block paving and artificial stone sidewalks laid.

Engineering		\$120 06
Engineering expense		3 82
Inspection		49 50
Advertising		8 25
Photographs		14 00
Labor, making templates		16 00
Bricks		14 00
Amount paid to John E. Quinn, under contract:		
18 cubic yards gravel filling furnished and placed @ \$1	\$18 00	
390 linear feet existing edge-stone reset @ 40c.	156 00	
400 cubic yards concrete base furnished and laid @ \$10	4,000 00	
14 square yards existing granite block paving relaid, gravel joints, @ \$1	14 00	
2,376 square yards granite block paving furnished and laid, grout joints, @ \$4.60	10,929 60	
28 square yards existing brick sidewalks relaid @ 50c.	14 00	
1,650 square feet artificial stone sidewalks furnished and laid @ 30c.	495 00	
1,111 square feet artificial stone sidewalk furnished and laid @ 24c.	266 64	
	<hr/>	15,893 24
		<u>\$16,118 87</u>

Dorchester avenue, from West Second street to Old Colony avenue, and in and near Andrew square and in Southampton and Boston streets.

Engineering	\$182 15
Inspection	1,282 50
Blocks	900 00
Bricks	100 52
Teaming	476 87

Amount paid to Boston Transit Department
for work done, under contract with Central
Construction Company:

*Dorchester avenue, from West Second street to
Old Colony avenue and adjoining streets.*

9,249 square yards concrete base @ \$1.25	\$11,561 25	
466 barrels cement in cement sand bed @ \$1.97	918 02	
1,826 square yards block paving relaid with grout joints @ 28c.	511 28	
8,010 square yards granite block pavement recut and re- laid with grout joints @ \$1.05	8,410 50	
		21,401 05

Dorchester avenue, in and near Andrew square.

3,430 square yards concrete base @ \$1.30	\$4,459 00	
115 barrels cement in sand bed @ \$1.97	226 55	
1,141 square yards cement sand bed @ 36c.	410 76	
726 square yards old granite paving blocks relaid with grout joints @ 30c.	217 80	
1,589 square yards old paving blocks recut and relaid with grout joints @ \$1.10	1,747 90	
1,119 square yards old granite paving blocks recut and relaid with grout joints @ \$1.95	2,182 05	
63 square yards old granite paving blocks relaid with gravel joints @ 85c.	53 55	
218 linear feet edgestone reset @ 35c.	76 30	
302 square yards brick side- walks relaid @ 40c.	120 80	
		9,494 71

Boston Street.

1,685 square yards concrete base @ \$1.30	\$2,190 50	
95 barrels cement in cement sand bed @ \$1.97	187 15	
Carried forward	\$2,377 65	\$33,837 80

<i>Brought forward</i>	\$2,377 65	\$33,837 80
1,663 square yards old granite paving blocks recut and relaid with grout joints @ \$1.10	1,829 30	4,206 95
<i>Southampton Street.</i>		
85 square yards granite paving blocks relaid with grout joints @ \$1.15	\$97 75	
85 square yards cement sand bed @ 36c.	30 60	
81 square yards concrete base @ \$1.30	105 30	
235 square yards old granite paving blocks recut and relaid with grout joints @ \$1.95	458 25	691 90
		<u>*\$38,736 65</u>
<i>Dorchester avenue, from Rawson street to Savin Hill avenue. (Work not started.)</i>		
Engineering	\$1,422 07	
Engineering expense	16 84	
Advertising	5 75	
Teaming	157 50	
		<u>\$1,602 16</u>
<i>East Broadway, from Dorchester street to L street. (Work not started.)</i>		
Engineering	\$906 96	
Engineering expense	9 71	
Advertising	5 80	
		<u>\$922 47</u>
<i>Leverett street, from Green street to Charles street.</i>		
Engineering	\$435 54	
Engineering expense	10	
Advertising	5 25	
		<u>\$440 89</u>
<i>Rutherford avenue, from Chapman street to Cambridge street.</i>		
Engineering	\$1,087 16	
Engineering expense	7 42	
		<u>\$1,094 58</u>
<i>Saratoga street, from Chelsea street to Bennington street. Length, 2,500 linear feet. Area, 8,527 square yards. Edgestone set and asphalt roadway laid.</i>		
Engineering	\$2,361 89	
Engineering expense	44 30	
Inspection	823 19	
Advertising	5 80	
Lumber	12 00	
Edgestone, 2,376 feet straight, 213 feet 4 inches circular and 14 small corners	3,241 89	
<i>Carried forward</i>	\$6,489 07	

* Of this amount \$2,942.04 was charged to appropriation for street improvements.

<i>Brought forward</i>	\$6,489 07	
Blocks	10 00	
Labor, making templets	474 88	
Teaming	213 96	
Amount paid Metropolitan Water and Sewerage Board for regulating catch-basins	538 81	
Amount paid to the Bermudez Company, under contract:		
2,500 linear feet straight edge-stone set @28c.	\$700 00	
268 linear feet circular edge-stone and corners set @ 30c.	80 40	
6,800 linear feet existing edge-stone reset @ 28c.	1,904 00	
100 square yards existing granite block paving relaid for edgings, concrete base, grout joints, @ \$3.50	350 00	
8,527 square yards concrete base, bituminous binder and asphalt wearing surface furnished and laid, sub-grade and concrete base (unfinished), @ \$2	17,054 00	
15,100 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$3.42	51,642 00	
16 covers reset @ \$3	48 00	
14 courses of brickwork @ 50c.	7 00	
	<u>\$71,785 40</u>	
Less 5 per cent retained,	<u>3,589 27</u>	
	68,196 13	
	<u>\$75,922 85</u>	

State street, from Merchants row to India street and Commercial street to Atlantic avenue. Length, 769 linear feet. Area, 4,998 square yards. Roadway paved with new granite block on concrete base and artificial stone sidewalks constructed.

Engineering	\$381 36
Engineering expense	1 93
Inspection	443 78
Advertising	10 50
Labor, making templets	16 00
Blocks	53 60
Labor, stonecutter	2 00
Photographs	10 50
	<u>\$919 67</u>
Credit: Bricks	73 15
	<u>\$846 52</u>
<i>Carried forward</i>	\$846 52

<i>Brought forward</i>		\$846 52
Amount paid to John E. Quinn, under contract:		
656 linear feet existing edge-stone reset @ 37c.	\$242 72	
812 cubic yards concrete base furnished and laid @ \$10.25	8,323 00	
4,998 square yards granite block paving furnished and laid, grout joints, @ \$4.90	24,490 20	
42 square yards existing granite block paving relaid, grout joints, @ \$1.80	75 60	
2 square yards existing brick sidewalks relaid @ 40c.,	80	
* 5,524 square feet artificial stone sidewalks furnished and laid @ 24c.	1,325 76	
8 covers reset @ \$3	24 00	
Extra work — Relay existing granite block paving in State street, from Broad street to Merchants row and in Chatham row:		
149 square yards existing granite block paving relaid, grout joints, @ \$1.80	268 20	
† 885 square yards existing granite block paving relaid, grout joints, @ \$1.65	1,460 25	
	<u>36,210 53</u>	
		<u>\$37,057 05</u>
<i>Summer street, from Fort Point channel to drawbridge. (Work not started.)</i>		
Engineering	\$167 74	
Engineering expense	30	
Advertising	5 40	
		<u>\$173 44</u>
<i>Tremont street, from Common street to Castle street. (Work not started.)</i>		
Engineering	\$380 80	
Engineering expense	6 45	
Advertising	5 50	
Photographs	14 00	
Labor, making templets	12 00	
		<u>\$418 75</u>
<i>Tremont street, from Castle street to Dover street. (Work not started.)</i>		
Engineering	\$651 96	
Engineering expense	4 13	
<i>Carried forward</i>	<u>\$656 09</u>	

* Decrease of six cents (omitting excavation to full depth).

† Decrease of fifteen cents (omitting cement in cement sand bed).

PUBLIC WORKS DEPARTMENT.

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<i>Brought forward</i>	\$656 09
Photographs	14 00
Advertising	5 75

\$675 84*Washington street, from Market street to Faneuil street.*

Engineering	\$1,097 38
Engineering expense	10 20

\$1,107 58

Washington street, from Forest Hills street to Archdale road. Length, 452 linear feet. Area, 4,822 square yards. Edgestone set, granite block pavement laid and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$1,171 18
Engineering expense	26 20
Inspection	1,170 07
Advertising	5 25
Labor, making templets	8 00
Lumber	14 69
Testing blocks	45 00
Edgestone, 9,160 feet straight, 169 feet circular, 10 small corners and 2 special cut stones, Amount paid to Simpson Brothers, under contract:	11,391 98

4,521 linear feet straight edgestone and corners hauled and set @ 35c., \$1,582 35

185 linear feet circular edgestone set @ 30c. 55 50

736 linear feet existing edgestone reset @ 25c. 184 00

4,822 square yards granite block paving furnished and laid, etc., @ \$5.98, 28,835 56

37,113 square feet artificial stone sidewalks furnished and laid @ 25c., 9,278 25

38 covers reset @ \$3 114 00

Extra work — Relay granite block paving with cement grout joints and cement sand bed in 6-inch cement concrete base.

54 square yards granite block paving relaid, grout joints, etc., @ \$3, 162 00

Extra work — Light dummy where directed.

28 nights, lighting dummy @ \$3.40 95 20

Extra work — Pile blocks left on street to be used in patching dummy.

1 day, foreman @ \$6. 6 00

11½ days' labor @ \$4 . 56 50

¾ double team @ \$8 . 3 00

Plus 15 per cent on \$62.50, 9 38

Carried forward \$40,381 74 \$13,832 37

<i>Brought forward</i>	\$40,381 74	\$13,832 37
Extra work — Grade approaches as directed.		
1/2 day, foreman, @ \$6	1 50	
5 1/2 days' labor @ \$4	20 50	
Plus 15 per cent on \$22	3 30	
1/2 day, double team, @ \$8	5 00	
Extra work — Cut sewer sheathing (buried):		
5 days' labor @ \$4	20 00	
Plus 15 per cent on \$20	3 00	
Extra work — Furnish stonecutter to dress back of edgestone at hydrants where directed:		
1 1/2 days, stonecutter, @ \$7	8 75	
Plus 15 per cent on \$8.75	1 31	
	<hr/>	
	\$40,445 10	
Less 78 feet 6-inch straight edgestone broken by contractor @ \$1.21	94 99	
	<hr/>	
	\$40,350 11	
Less amount retained	2,017 51	
	<hr/>	
		38,332 60
		<hr/>
		\$52,164 97

STREET IMPROVEMENTS.

Albany street, from *Dover street* to *Northampton street*. Unfinished work on contract of B. E. Grant completed by Paving Service force; 293 square yards wood block pavement laid on concrete base, 473 square yards granite block laid on concrete base with grout joints and 244 square yards flagging crosswalks and 107 square yards block stone driveways constructed.

Engineering	\$194 53
Engineering expense	6 61
Inspection	74 79
Flagging, 199 feet	149 16
Wood blocks, 12,380	742 80
Granite blocks, new, 10,225	872 48
Cement, 178 1/2 barrels	464 75
Crushed stone, 143.4 tons	322 77
Edgestone	43 34
Sand	6 00
Gravel, 261 cubic yards	270 29
Lumber	16 57
Nails	75
Teaming	202 00
Labor, making templates	8 00
Labor, edgestone, excavating	45 00
Labor, edgestone setting	75 96
Labor, brick walks excavating	70 15
Labor, brick walk repaving	306 20
Labor, crosswalk excavating	11 00
Labor, crosswalk repaved	145 95
Labor, roadway excavating	338 89
Labor, concrete base	384 71
	<hr/>
<i>Carried forward</i>	\$1,752 70

PUBLIC WORKS DEPARTMENT.

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<i>Brought forward</i>		\$4,752 70
Labor, roadway paving		712 61
Labor, paving grouting		106 50
Cost of work done under contract by B. E. Grant	\$134,291 69	
Amount paid in 1916	\$53,911 26	
Amount paid in 1917	77,754 77	
	<u>131,666 03</u>	
Amount paid in 1918		<u>2,625 66</u>
		<u>\$8,197 47</u>

Albany street, from Kneeland street to Boston & Albany Railroad. Length, 1,275 linear feet. Area, 6,158 square yards. Reset edgestone, granite block paving laid and artificial stone sidewalks constructed.

Engineering	\$287 20
Engineering expense	5 33
Inspection	296 15
Advertising	5 10
Edgestone	23 52
Teaming	3 00
Labor, catch-basins	160 90
Lumber	13 44
	<u>\$794 64</u>
Credit: Old blocks, \$112; old bricks, \$14	<u>126 00</u>
	\$668 64

Amount paid to Coleman Brothers, under contract:

34 linear feet straight edge-stone and corners hauled and set @ 35c..	\$11 90
19 linear feet circular edge-stone set @ 35c.	6 65
1,880 linear feet existing edge-stone reset @ 30c.	564 00
1,027 cubic yards concrete base furnished and laid @ \$11	11,297 00
105 square yards existing granite block paving relaid, gravel joints, @ \$1,	105 00
6,153 square yards granite block paving furnished and laid, grout joints, @ \$4.75	29,250 50
913 square yards existing granite block paving relaid, grout joints, @ \$2,	1,826 00
734 square yards existing brick sidewalks relaid @ 60c.	440 40
6,267 square feet artificial stone sidewalks furnished and laid @ 30c.	1,880 10
8 covers reset @ \$3	24 00
Extra work — Construct new driveway at No. 91 and 129:	
40 hours' labor @ 45c.	18 00
<i>Carried forward</i>	<u>\$45,423 55</u>
	<u>\$668 64</u>

<i>Brought forward</i>	\$45,423 55	\$668 64
8 hours, stonecutter, @ 90c.	7 20	
8 hours, edgestone setter, @ 75c.	6 00	
12 hours, helper, @ 50c.	6 00	
Plus 15 per cent on \$37.20,	5 58	
Extra work — Rebuild fence between Curve street and bridge:		
4 hours, carpenter, @ 75c .	3 00	
8 hours, helper, @ 50c. .	4 00	
Plus 15 per cent on \$7,	1 05	
Extra work — Raise sewer manholes over six inches:		
4 hours, mason, @ 75c. .	3 00	
4 hours, tender, @ 50c. .	2 00	
4 hours' labor @ 45c. .	1 80	
Plus 15 per cent on \$6.80,	1 02	
Extra work — Cut capstone and point the same:		
20 hours, stonecutter, @ 90c.	18 00	
8 hours, mason, @ 75c. .	6 00	
Plus 15 per cent on \$24,	3 60	
Extra work — Remove sidewalks where directed in front of freight house:		
4 hours, foreman, @ 75c. .	3 00	
40 hours' labor @ 45c. . .	18 00	
Plus 15 per cent on \$21,	3 15	
8 hours, double team, @ \$1,	8 00	
	<hr/>	
	45,523 95	
		<hr/>
		\$46,192 59

Amory street (north side), from Bragdon street to Atherton street. Length, 513 feet. Area, 1,950 square yards. Work done by department force. 339 feet straight edgestone reset, 43 feet circular edgestone reset, 29 square yards crosswalks relaid, 1,950 square yards old block pavement laid with grout joints on gravel base.

Engineering	\$170 13
Inspection	20 73
Gravel, 357 cubic yards	375 01
Cement, 219 barrels	568 75
Flagging, 10 feet, old	4 00
Crushed stone, 35.6 tons	80 22
Blocks, 48,796 old granite	975 92
Steam roller, picking	42 00
Teaming	1,334 75
Labor, edgestone excavating	33 24
Labor, edgestone resetting	33 24
Labor, roadway excavating	1,101 40
Labor, roadway paving	1,133 36
Labor, roadway grouting, paving	79 96
Labor, crosswalk excavating	30 74
Labor, crosswalk relaying	55 98
	<hr/>
	*\$6,039 43

* \$1,330.60 of this amount was paid from appropriation for Paving Service.

Appleton street, from Berkeley street to Columbus avenue. (Work done in 1916.)

Engineering	\$15 00	
Amount of contract with Warren Brothers Company	\$9,898 67	
Amount paid in 1916	9,403 74	
	<hr/>	494 93
		<hr/> <u>\$509 93</u>

Arlington street, from Boylston street to St. James avenue. Length, 196 linear feet. Area, 898 square yards. Brick block paving laid.

Engineering	\$51 19	
Inspection	149 58	
Engineering expense	1 90	
Lumber	8 40	
Bricks, 40,000 Bessemer paving	2,100 00	
Labor, making templets	3 50	
Amount paid to Coleman Brothers, under contract:		
898 square yards preparing site @ 50c.	449 00	
898 square yards concrete base furnished and laid @ \$2	1,796 00	
898 square yards brick block paving laid, cements and bed, grout joints, @ \$1	898 00	
32 square yards granite block paving relaid, sand bed and grout joints, @ \$1	32 00	
Extra work—Set sewer man-holes and catch-basins to grade:		
4 Covers set to grade @ \$3	12 00	
	<hr/>	2,708 95
Less 15 per cent retained	\$3,187 00	
	478 05	
	<hr/>	<u>\$5,023 52</u>

Artificial Stone Sidewalks.

Rebates allowed to contractors	\$2,465 48	
Repairs made	1,799 22	
Advertising	12 65	
	<hr/>	<u>\$4,277 35</u>

Asphalt Repairs on street upon which the maintenance guaranty has expired.

Engineering	\$1,113 07	
Engineering expense	46 99	
Inspection	1,352 92	
Advertising	7 70	
Labor, chemist	1,078 81	
Amount paid to Central Construction Company on contract for 1917	1,438 09	
	<hr/>	\$5,037 58
Carried forward		

<i>Brought forward</i>		\$5,037 58	
Amount paid to the Bermudez Company, under contract:			
45,769.62 square yards bitumi- nous pavement fur- nished and laid (April 1, 1918, to January 1, 1919) @ \$1.38	\$63,162 08		
1,511.49 square yards surface patching @ 60c.	906 89		
157.27 cubic yards extra bi- tuminous binder @ \$12	1,887 24		
373.27 square yards concrete base furnished and laid @ \$3.50	1,306 45		
60 covers reset @ \$3	180 00		
	<u>\$67,442 66</u>		
Less amount retained 5 per cent	3,372 13		
		64,070 53	
			<u>\$69,108 11</u>
<i>Batterymarch street, from Franklin street to Broad street. (Work done in 1916.)</i>			
Engineering	\$3 00		
Final payment on contract to B. E. Grant	38 46		
			<u>\$41 46</u>
<i>Beach street, from Harrison avenue to Atlantic avenue. Length, 1,207 linear feet. Area, 3,390 square yards. Edgestone reset, roadway paved with granite block and artificial stone sidewalks constructed.</i>			
Engineering	\$40 50		
Advertising	1 75		
Paving blocks, 5,000	375 00		
Amount paid to V. Grande, under contract for laying artificial stone sidewalks	49 56		
Cost of work done under con- tract with B. E. Grant, con- tract made in 1916	\$16,614 99		
Allowance for loss due to delays as per recommendation of Boston Finance Commission,	1,579 34		
	<u>\$18,194 33</u>		
Amount paid in 1917	16,576 53		
		1,617 80	
			<u>\$2,084 61</u>
<i>Beacon street, from Tremont street to Park street. Length, 846 linear feet. Area, 2,880 square yards. Edgestone set, wood block crosswalks at Tremont street and granite block pavement laid. Work done in 1917.</i>			
Engineering	\$22 71		
Labor, chemist	45 00		
Cost of work done in 1917 under contract with Warren Brothers Company	\$12,934 38		
Amount paid in 1917	12,834 38		
		100 00	
			<u>\$167 71</u>

Beacon street, from Park street to Charles street. Length, 1,696 linear feet. Area, 7,340 square yards. Edgestone reset, gutters repaved, roadway paved with Topeka and brick sidewalks relaid. Work done in 1917.

Engineering	\$16 00	
Cost of work done by contract with Warren Brothers Company in 1917	\$13,519 96	
Amount paid in 1917	13,419 96	
	<hr/>	100 00
		<hr/>
		<u>\$116 00</u>

Beacon street, from Raleigh street to Boston & Albany Railroad. Length, 1,623 linear feet. Area 10,073 square yards. Edgestone reset, asphalt pavement laid and artificial stone sidewalks constructed.

Unfinished work from 1917. Final payment not made.

Engineering	\$254 44
Engineering expense	7 33
Inspection	269 86
Labor, chemist	29 38
Photographs	10 50

Amount paid to the Bermudez Company, under tract:

364 linear feet existing edge-stone reset @ 23c.	\$83 72	
5 square yards granite block paving relaid, gravel joints, @ \$1	5 00	
729 square yards granite block paving relaid, grout joints, gravel bed, etc., @ \$1.10	801 90	
114 square yards granite blocks taken up, cleaned, culled and relaid (in brows and dummy of car tracks) concrete base, grout joints, etc., @ \$2.10	239 40	
243 square yards granite blocks taken up, cleaned, culled and relaid (in gutters and "edgings") concrete base, grout joints, etc., @ \$2.10	510 30	
2,100 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.53	5,313 00	
7,973 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation @ \$1.43	11,401 39	
4,697 square feet artificial stone sidewalks furnished and laid @ 19½c.	904 17	
9 covers reset @ \$3	27 00	
	<hr/>	
<i>Carried forward</i>	\$19,285 88	\$571 51

<i>Brought forward</i>	\$19,285 88	\$571 51
Extra work — Suspend work on street on account of auto show and make street safe for traffic:		
19 hours, foreman, @ 75c.	14 25	
138 hours, labor @ 35c.	48 30	
Plus 15 per cent on \$62.55,	9 38	
8 hours, double team, @ \$1,	8 00	
Extra work — Barring up, cleaning and relaying wood block pavement at Commonwealth avenue:		
28 hours, paver, @ 75c.	21 00	
Plus 15 per cent on \$21	3 15	
	<hr/>	
	\$19,389 96	
Less amount paid in 1917,	5,847 45	
	<hr/>	
	\$13,542 51	
Less 5 per cent retained	969 49	
	<hr/>	
		12,573 02
		<hr/>
		<u>\$13,144 53</u>

Blossom street, from Fruit street to Allen street. Length, 511 linear feet. Area, 1,562 square yards. Edgestone reset, brick block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering		\$7 71
Cost of work done under contract with Warren Brothers Company in 1917	\$4,638 52	
Amount paid in 1917	4,406 59	
	<hr/>	
		231 93
		<hr/>
		<u>\$239 63</u>

Bowdoin street, from Mt. Ida road to Topliff street. Length, 442 linear feet. Area, 593 square yards. Edgestone reset, granite block paving laid and artificial stone sidewalk constructed.

Engineering		\$75 99
Inspection		99 72
Blocks, 25,400 recut granite		914 40
Amount paid to the Bermudez Company, under contract:		
442 linear feet existing edgestone reset @ 23c.	\$101 66	
593 square yards granite block paving hauled and laid (in brows and dummy of car tracks), concrete base, grout joints, etc., @ \$2.60	1,541 80	
2,600 square feet artificial stone sidewalks furnished and laid @ 19½c.	500 50	
	<hr/>	
<i>Carried forward</i>	\$2,143 96	\$1,090 11

<i>Brought forward</i>	\$2,143 96	\$1,090 11
91 square feet artificial stone driveways furnished and laid @ 24c.	21 84	
	<hr/>	
	\$2,165 80	
Less 5 per cent retained,	108 29	
	<hr/>	
		2,057 51
		<hr/>
		<u>*\$3,147 62</u>

Rowdoin street, from Winter street to Quincy street. Length, 1,013 feet. Area, 4,127 square yards. Four hundred and twelve feet straight and 46 feet circular edgestone (new) set, 465 feet straight edgestone reset, 40 square yards crosswalks relaid, 44 square yards gutters repaved and 4,127 square yards Topeka pavement laid 2½ inches deep on existing macadam.

Engineering	\$92 13
Inspection	199 44
Labor, edgestone excavating	356 53
Labor, edgestone setting and resetting	199 39
Labor, macadam excavating	750 20
Labor, Topeka spreading	351 69
Labor, gutter excavating	57 97
Labor, crosswalk excavating	18 24
Labor, brickwalk excavating	7 50
Labor, brick walk relaying	7 50
Labor, stonecutters	57 47
Sand	4 00
Gravel	17 60
Cement	81 35
Edgestone, 438 feet	527 32
Flagging	26 00
Charcoal	8 50
Road oil	4 90
Asphalt for top, 698 tons	5,536 23
Straw roller, picking	42 00
Steam roller, rolling	392 00
Removing trees	900 00
Teaming	1,352 65
	<hr/>
	† \$10,990 61
	<hr/>

Boylston street, from Tremont street to Washington street. (Work done in 1917.)

Engineering expense	\$2 09
Cost of work done by Warren Brothers Company, under contract in 1917	\$6,054 54
Amount paid in 1917	5,751 81
	<hr/>
	302 73
	<hr/>
	<u>\$304 82</u>

Brighton avenue, from Commonwealth avenue to Cambridge street. Length, 3,162 linear feet. Area, 16,412 square yards. Edgestone reset, gutters paved, asphalt pavement laid and artificial stone sidewalks constructed. (Unfinished work from 1917.)

* \$914.40 of this amount was paid from Paving Service appropriation.

† \$8,376.82 of this amount paid out of Paving Service appropriation.

Engineering	\$123 86
Engineering expense	2 90
Inspection	347 51

 \$474 27

Credit: bricks	86 69
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 \$387 58

Amount paid to the Bermudez Company under contract:

130 tons crushed stone furnished and placed, watered and rolled, @ \$2.50	\$325 00
3,477 linear feet existing edge-stone reset @ 23c.	799 71
4,557 square yards existing granite block paving taken up, cleaned, culled and relaid, grout joints, @ \$1.10	5,012 70
16,412 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation @ \$1.43	23,469 16
34,331 square feet artificial stone sidewalks furnished and laid @ 19½c.,	6,608 72
953 square feet artificial stone driveways furnished and laid @ 24c.	228 72
8 covers reset @ \$3	24 00
Extra work — Bar out and repave gutters and set corners for new driveways:	
8 hours, edgestone setter @ 75c.	6 00
16 hours' labor @ 35c.	5 60
Plus 15 per cent on \$11.60	1 74
Extra work — Raise Bradley-Head catch basin to grade:	
4 hours, mason, @ 75c.	3 00
8 hours' labor @ 35c.	2 80
Plus 15 per cent on \$5.80,	87
2 bags cement @ 60c.	1 20
75 brick @ 2c.	1 50

 \$36,490 72

Less amount paid in 1917	28,153 35
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 \$8,337 37

Amount retained, 5 per cent of \$36,490.72	1,824 55
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 6,512 82

\$6,900 40

Canal street, from Haymarket square to Causeway street. Length, 990 linear feet. Area, 4,438 square yards. Work done in 1917.

Engineering	\$15 22	
Inspection	24 93	
Advertising	1 75	
Cost of work done by B. E. Grant, under contract in 1917 and paid for	\$21,469 33	
Allowance for loss due to delays, etc., as per recommendation of the Boston Finance Commission	1,839 50	
	<u>\$23,308 83</u>	
Less amount paid in 1917	<u>21,469 33</u>	1,839 50
Amount paid to V. Grande, repairing artificial stone sidewalks, under contract	70 77	
		<u><u>\$1,952 17</u></u>

Chandler street, from Berkeley street to Clarendon street. (Work done in 1917.)

Final payment on contract with Warren Brothers Company	\$399 35	
		<u><u>\$399 35</u></u>

Charles street, from Beacon street to Boylston street. Length, 1,313 linear feet. Area, 1,267 square yards. Edgestone reset and granite block pavement laid.

Engineering	\$159 24	
Engineering expense	05	
Inspection	344 01	
Advertising	5 45	
Edgestone	116 91	
Blocks, 50,175 recut	1,506 30	
Labor, handling stock	4 00	
Amount paid to James Doherty, under contract:		
1,313 linear feet existing edgestone reset @ 40c.	\$525 20	
1,267 square yards granite block paving hauled and laid, concrete base, cement sand bed, grout joints, @ \$3.55	4,497 85	
597 square yards existing brick sidewalks relaid @ 47c.,	280 59	
	<u>\$5,303 64</u>	
Less 15 per cent retained,	<u>795 55</u>	4,508 05
		<u><u>*\$6,944 05</u></u>

Clinton street, from Merchants row across Commercial street. Length, 608 linear feet. Area, 2,819 square yards. Reset edgestone, granite block paving laid and artificial stone sidewalks constructed.

*\$1,714.98 of this amount was paid from appropriations for Paving Service.

Engineering	\$174 11
Engineering expense	2 35
Inspection	115 09
Edgestone, 224 feet 3 inches straight and 9 feet 5 inches circular	285 28
Lumber	9 44
Labor, making templets	18 00
Testing blocks	15 00
Advertising	1 93
Teaming	4 50

\$625 70

Credit: Bricks, \$7; blocks, \$714 00

\$611 70

Amount paid to Coleman Brothers under contract:

225 linear feet straight edgestone and corners hauled and set @ 30c.,	\$67 50
10 linear feet circular edgestones set @ 30c. . .	3 00
277 linear feet existing edgestone reset @ 30c. . .	83 10
463 cubic yards concrete base furnished and laid @ \$10	4,630 00
232 square yards existing granite block paving relaid, gravel joints, @ \$1	232 00
360 square yards granite block paving furnished and laid @ \$4.30	1,548 00
73 square yards existing granite block paving relaid, mortar bed, asphalt joints, @ \$1.30,	94 90
2,380 square yards granite block paving furnished and laid, cement sand bed, grout joints, @ \$4.15	9,877 00
6 square yards existing granite block paving relaid, cement sand bed, grout joints, @ \$1.25	7 50
34 square yards existing flagging crosswalks relaid, mortar bed, asphalt joints, @ \$2,	68 00
26 square yards existing flagging crosswalks relaid, cement sand bed, grout joints, @ \$2	52 00
1 square yard existing brick sidewalk relaid @ 50c.	50
2,852 square feet artificial stone sidewalks furnished and laid @ 25c.	713 00

Carried forward	\$17,376 50	\$611 70
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<i>Brought forward</i>	\$17,376 50	\$611 70
19 covers reset @ \$3	57 00	
Extra work — Dress old flagging for relaying crosswalk:		
5 hours, stonecutter, @ 90c.,	4 50	
Plus 15 per cent on \$4.50	68	
Extra work — Reset edgestone and repair artificial stone sidewalk on account of change in line:		
74 hours' labor @ 45c.	33 30	
13 hours, edgestone setter, @ 75c.	9 75	
13 hours, rammer, @ 50c.	6 50	
3 hours, finisher, @ 80c.	2 40	
Plus 15 per cent on \$51.95	7 79	
3 bags cement @ 75c.	2 25	
3 cubic feet sand @ 10c.	30	
	<hr/> 17,500 97	
		<hr/> <u>\$18,112 67</u>

Columbia road, from Edward Everett square to Dudley street. Length, 1460 linear feet. Area, 486 square yards. Edgestone reset, granite block pavement laid and existing brick sidewalks relaid. (Work done in 1917.)

Final payment on work done in 1917 by Bernard E. Grant, under contract	<u>\$38 46</u>
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Congress street, from Milk street to Atlantic avenue. (Work not started.)

Engineering	<u>\$180 42</u>
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Cross street, from Commercial street to Haymarket square. Length, 1,406 linear feet. Area, 2,988 square yards. Reset edgestone, laid granite block paving and artificial stone sidewalks constructed. Relaid brick sidewalks.

Engineering	\$289 64
Engineering expense	2 05
Inspection	240 09
Advertising	1 93
Edgestone	58 46
Bricks	7 00
Labor, making templets	12 00
Teaming	7 50
Testing blocks	15 00

Amount paid to Coleman Brothers, under contract:

40 linear feet circular edgestone set @ 30c.	\$12 00	
1,516 linear feet existing edgestone reset @ 30c.	454 80	
520 cubic yards concrete base furnished and laid @ \$10	5,200 00	
	<hr/> \$5,666 80	
Carried forward		<u>\$633 67</u>

<i>Brought forward</i>	\$5,666 80	\$633 67
73 square yards existing granite block paving relaid, gravel joints @ \$1	73 00	
99 square yards granite block paving furnished and laid, mortar bed, asphalt joints @ \$4.30	425 70	
75 square yards existing granite block paving relaid, mortar bed, asphalt joints, @ \$1.30,	97 50	
2,988 square yards granite block paving furnished and laid, cement sand bed, grout joints @ \$4.15	12,400 20	
1 square yard existing granite block paving relaid, cement sand bed, grout joints @ \$1.25	1 25	
15 square yards existing flagging crosswalks relaid, mortar bed, grout joints, @ \$2	30 00	
13 square yards existing flagging crosswalks relaid, cement sand bed, grout joints @ \$2	26 00	
395 square yards existing brick sidewalks relaid @ 50c.,	197 50	
2,455 square feet artificial stone sidewalks furnished and laid @ 25c.	613 75	
19 covers reset @ \$3	57 00	
Extra work — Dress old flagging for relaying crosswalks:		
10 hours, stone cutter, @ 90c.,	9 00	
Plus 15 per cent on \$9	1 35	
Extra work — Widen roadway as directed:		
54 hours, foreman, @ 75c.	40 50	
324 hours' labor @ 45c.	145 80	
78 hours, stonecutter, @ 90c.,	70 24	
24 hours, mason, @ 80c.	19 20	
8 hours, tender, @ 50c.	4 00	
62 hours edgestone setter, @ 75c.	46 50	
160 hours, helper, @ 50c.	80 00	
12 hours, paver, @ 75c.	9 00	
12 hours, rammer, @ 50c.	6 00	
Plus 15 per cent on \$421.20	63 18	
51 hours, double team, @ \$1	51 00	
14 bags cement @ 75c.	10 50	
	<hr/> 20,144 93	
		<hr/> <u>\$20,778 60</u>

D street, from Dorchester avenue to West Seventh street. (Work not started.)

Engineering	\$545 96	
Engineering expense	3 16	
		<u>\$549 12</u>

Dartmouth street, from Tremont street to Stuart street. Length, 1,752 linear feet. Area, 5,780 square yards. Edgestone reset, granite blocks laid and artificial stone sidewalks constructed.

Engineering	\$519 37
Engineering expense	16 94
Inspection	571 77
Advertising	10 50
Teaming	3 00
Labor, making templates	16 00
Labor, raising manholes	34 40
Edgestone, 107 feet circular	158 30
Blocks, 41,625 recut	1,498 50

\$2,828 78

Credit: Old blocks, 13,050	\$261 00	
Old bricks	470 40	
		<u>731 40</u>

\$2,097 38

Amount paid to James Doherty, under contract:

109 linear feet circular edgestone set @ 25c.	\$27 25
2,504 linear feet existing edgestone reset, @ 20c.,	500 80
973 cubic yards concrete base furnished and laid @ \$9	8,757 00
944 square yards existing granite block paving relaid, gravel joints, @ 60c.	566 40
4,908 square yards granite block paving furnished and laid, grout joints, @ \$4.25	20,859 00
645 square yards existing brick sidewalks relaid @ 48c.	309 60
4,755 square feet artificial stone sidewalks furnished and laid @ 27c.	1,283 85
14,214 square feet artificial stone sidewalks furnished and laid @ 21c.,	*2,984 94
15 covers reset @ \$3	45 00
Overhaul: Section 1, Article E.	
197 tons material hauled to Amory street, excess haul of 1½ miles, per half mile, per ton, @ 11c.	65 01

<i>Carried forward</i>	<u>\$35,398 85</u>	<u>\$2,097 38</u>
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* Decrease of six cents per square foot.

<i>Brought forward</i>	\$35,398 85	\$2,097 38
Extra work — Omit the furnishing and laying of new granite block and substitute the hauling and laying of recut granite blocks: 990 square yards recut granite blocks hauled and laid, grout joints, cement sand bed, etc., @ \$1.85	1,831 50	
		37,230 35
		<u>*\$39,327 73</u>

Dearborn street, from Albany street to Dudley street. Length, 495 linear feet. Area, 1,100 square yards. Edgestone reset, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering expense		\$0 30
Work done by Warren Brothers Company, under contract in 1916 and 1917,	\$4,862 07	
Less amount paid in 1916	\$2,871 33	
Less amount paid in 1917	1,706 94	
	4,578 27	
		283 80
		<u>\$284 10</u>

Devonshire street, from Adams square to Water street. Length, 696 linear feet. Area, 2,032 square yards. Edgestone reset, wood block pavement laid and existing brick sidewalks relaid. (Work done in 1916 and 1917.)

Engineering		\$8 00
Amount paid to B. E. Grant on final payment on contract		38 46
		<u>\$46 46</u>

Dorchester avenue, from Freeport street to Park street. Length, 3,352 linear feet. Area, 7,149 square yards. Granite block pavement laid. (Unfinished work from 1917 on contract of B. E. Grant.)

Engineering	\$674 04
Engineering expense	16 02
Inspection	706 99
Advertising	5 00
Labor, making templates	8 00
Labor, stonecutters	4 00
Labor, edgestone excavating	11 00
Labor, edgestone resetting	19 00
Labor, brickwalk excavating	5 50
Labor, brickwalk repaving	9 50
Planning	16 50
Gravel	4 32
Blocks, 37,025 recut granite	1,312 90
Labor, on artificial stone sidewalks	12 00
<i>Carried forward</i>	<u>\$2,804 77</u>

* Of this amount \$986.70 was paid from the appropriation for Paving Service.

<i>Brought forward</i>		\$2,804 77
Amount paid to James Doherty under contract:		
710 square yards existing granite block paving relaid gravel joints, @ 60c.	\$426 00	
896 square yards granite block paving recut at Massachusetts avenue lot, hauled and laid, concrete base, grout joints, @ \$3.98	3,566 08	
6,253 square yards granite block paving, recut on street, relaid concrete base and grout joints, @ \$3.75	23,448 75	
Extra work — Relay granite block paving where directed in approaches on gravel base with grout joints.		
745 square yards granite block paving relaid, grout joints, @ \$1.75	1,303 75	
Extra work — Reset crosswalks on 6-inch concrete base, grout joints and relay recut granite blocks, grout joints, where directed.		
10 hours, foreman, @ 75c.	7 50	
19 hours, paver, @ 75c.	14 25	
34 hours, tender, @ 50c.	17 00	
130 hours labor @ 45c.	58 50	
Plus 15 per cent on \$97.25,	14 59	
8 hours, double team, @ \$1,	8 00	
1 ton crushed stone @ \$3	3 00	
156 cubic feet sand @ 7c.	10 92	
60 bags cement @ 81½c.	48 75	
	<hr/>	
	\$28,927 09	
Amount retained	4,357 08	
	<hr/>	
		24,570 01
Final payment to B. E. Grant on contract made in 1917		706 55
		<hr/>
		*\$28,081 33

Dorchester avenue, from Savin Hill avenue to Freeport street. (Unfinished work from 1917.)

Engineering	\$101 95
Engineering expense	1 60
Sand, 181 cubic yards	290 03
Cement, 55½ barrels	130 55
Bricks, 36,755	540 78
Gravel	36 96
Lumber	6 01
Crushed stone	28 13
Labor, edgestone reset	3 50
Labor, roadway excavation	24 00

Carried forward **\$1,163 51**

* Of this amount \$1,095.30 was paid from appropriation for Paving Service.

<i>Brought forward</i>	\$1,163 51	
Labor, roadway paving	274 75	
Labor, concrete base	46 50	
Labor, brickwalk excavation	399 75	
Labor, brickwalk repaving	707 00	
Teaming	422 25	
Final payment to B. E. Grant under contract,	38 47	
		<u>\$3,052 23</u>

Dorchester avenue, from Peabody square to Washington street. Length, 5,000 linear feet. Area, 20,883 square yards. Edgestone reset, second-hand granite block paving laid and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$548 58
Engineering expense	13 31
Inspection	401 72
Blocks, old, 121,920	2,552 22
Teaming	4 00

\$3,519 83

Credit: Bricks, old 5 00

\$3,514 83

Amount paid to James Doherty under contract:

Removing trees, etc.	\$130 00	
18 cubic yards water box excavation @ \$1.30	23 40	
35.3 cubic yards rock excavation @ \$7	247 10	
99 linear feet circular edgestone set @ 21c.	20 79	
7,470 linear feet existing edgestone reset @ 17c.	1,269 90	
1,287 linear feet crushed stone and concrete foundation furnished and placed @ 19c.	244 53	
14,547 square yards granite block paving hauled and laid, grout joints, @ \$1.39,	20,220 33	
494 square yards existing granite block paving relaid, grout joints, @ 90c.	444 60	
47 square yards existing flagging crosswalks relaid, grout joints, @ 90c.	42 30	
1,147 square yards wood block pavement furnished and laid, concrete base, @ \$4.47	5,261 19	
101 square yards existing brick sidewalks relaid @ 35c.	35 35	
58,073 square feet artificial stone sidewalks furnished and laid @ 21c.	12,195 33	
1,672 square feet artificial stone driveways furnished and laid @ 23c.	384 56	

Carried forward \$40,519 38 \$3,514 83

<i>Brought forward</i>	\$40,519 38	\$3,514 83
31 covers @ \$3	93 00	
Extra work—Regular Bradley-Head catch- basin at the west corner of Codman street, op- posite Van Winkle street.		
12 hours, mason, @ 62½c.	7 50	
20 hours' labor, @ 36c.	7 20	
Plus 15 per cent on \$14.70,	2 21	
4 bags cement @ 70c.	2 80	
Extra work—Construct a blind drain from the catch-basin on the northwest corner of Codman street to about 200 feet northerly.		
16 hours, foreman, @ 62½c.,	10 00	
88 hours' labor, @ 36c.	31 68	
Plus 15 per cent on \$41.68,	6 25	
16 hours, double team, @ 87½c.	14 00	
Extra work—Cut con- crete around Boston Elevated poles.		
8 hours' labor @ 36c.	2 88	
Plus 15 per cent on \$2.88,	43	
Extra work—Excavate below sub-grade to re- move the Telford base where directed.		
495 cubic yards Telford base excavated @ \$1	495 00	
Extra work—Regulate Bradley-Head catch- basins on the easterly side between Codman street and Ashmont street where directed:		
28 hours, mason, @ 62½c.	17 50	
64 hours' labor @ 45c.	28 80	
Plus 15 per cent on \$46.30,	6 95	
6½ bags cement @ 70c.	4 55	
165 bricks @ \$15	2 48	
Extra work—Remove tree from the easterly sidewalk near number 2,064:		
Tree removed	35 00	
Extra work—Build a blind drain under the sidewalk on the east- erly side in front of the Convalescents' Home:		
347 linear feet blind drain built @ 75c.	260 25	
Extra work—Plaster the street car rails with cement mortar (1917):		
14,790 linear feet rails plastered @ 8½c.	1,257 15	
<i>Carried forward</i>	\$42,805 01	\$3,514 83

<i>Brought forward</i>	\$42,805 01	\$3,514 83
Extra work—Plaster the street car rails with cement mortar (1918):		
4,090 linear feet rails plastered @ 8½c.	347 65	
	<u>\$43,152 66</u>	
Less amount paid in 1917,	11,441 76	
		<u>31,710 90</u>
		<u><u>\$35,225 73</u></u>

Endicott street, from Hanover street to Lafayette avenue. Length, 1,204 feet. Area, 4,363 square yards. Edgestone reset, 1,394 linear feet; old block paving relaid with grout joints, 3,713 square yards; with gravel joints, 650 square yards; brick sidewalks relaid, 791 square yards; asphalt block sidewalks relaid, 241 square yards, and artificial stone walks relaid, 179 square feet.

Engineering	\$515 14
Engineering expense	1 46
Gravel, 268 tons	231 85
Crushed stone, 39 tons	105 75
Sand	148 00
Cement, 415½ barrels	1,217 63
Bricks, 5,300 sidewalk	37 10
Blocks, 17,850 old	528 00
Teaming	888 00
Labor, edgestone excavating	228 43
Labor, edgestone resetting	337 63
Labor, brick walk excavating	45 74
Labor, brick walk repaving	425 10
Labor, roadway excavating	1,272 44
Labor, roadway repaving	2,051 65
Labor, artificial stone walks	13 00
Labor, grouting paving	325 91
Labor, asphalt block sidewalk relaid	63 25
Labor, crosswalk excavating	12 73
	<u>*\$8,448 81</u>

Federal street, from Milk street to Atlantic avenue. (Work done in 1917.)

Engineering	<u>\$153 13</u>
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Fruit street, from Blossom street to Charles street. Length, 954 linear feet. Area, 1,987 square yards. Edgestone reset, brick block gutter laid, asphalt pavement laid and artificial stone sidewalk and one driveway constructed. (Work done in 1917.)

Engineering	\$8 66
Final payment to Warren Brothers Company for work done in 1917, under contract	301 79
	<u><u>\$310 45</u></u>

Harrison avenue, from Kneeland street to Dover street. Length, 2,324 linear feet. Area, 5,381 square yards. Reset edgestone, roadway paved with granite block, brick sidewalks relaid and artificial stone walks constructed.

* Of this amount \$3,808.08 was paid from appropriation for Paving Service.

Engineering	\$490 32	
Engineering expense	7 45	
Inspection	280 70	
Edgestone	228 90	
Testing blocks	45 00	
Amount paid Boston Elevated Railway Company	871 01	
Labor on catch-basins	17 20	
Advertising	5 30	
	<hr/>	
	\$1,943 88	
Credit: Bricks, 66,370 old	474 60	
	<hr/>	\$1,469 28
Amount paid to B. E. Grant, under contract:		
10 linear feet circular edge- stone set @ 16c.	\$1 60	
279 linear feet existing edge- stone reset @ 12c.	33 48	
400 cubic yards concrete base furnished and laid @ \$5.05	2,020 00	
2,308 square yards granite block paving furnished and laid, grout joints, @ \$3.28	7,570 24	
11 square yards existing flagging crosswalks re- laid, gravel joints, @ 50c.	5 50	
62 square yards existing brick sidewalks relaid @ 28c.	17 36	
1 cover reset @ \$3	3 00	
Extra work—Cut and re- move asphalt and con- crete at Florence street:		
3 hours, foreman, @ 75c.	2 25	
15 hours' labor @ 35c.	5 25	
Plus 15 per cent on \$7.50,	1 13	
Extra work—Remove material left on street by Water Service:		
5 hours, foreman, @ 75c.	3 75	
65 hours' labor @ 35c.	22 75	
Plus 15 per cent on \$26.50,	3 98	
4 hours, auto truck, @ \$4.37½	17 50	
Extra work—Raise Brad- ley-Head catch basins over six inches:		
26 hours, mason, @ 75c.	19 50	
44 hours' labor @ 35c.	15 40	
Plus 15 per cent on \$34.90,	5 24	
	<hr/>	
	\$9,747 93	
Less amount paid in 1917,	9,709 46	
	<hr/>	
Carried forward	\$38 47	\$1,469 28

<i>Brought forward</i>	\$38 47	\$1,469 28
Allowance: Article 8 of contract.		
Amounts allowed for loss due to delays as per recommendations of Boston Finance Commission, dated September 19, 1918	5,788 24	5,826 71
Amount paid to Coleman Brothers, under contract:		
120 linear feet straight edge-stone and corners hauled and set @ 30c.	\$36 00	
95 linear feet circular edge-stone set @ 25c.	23 75	
3,750 linear feet existing edge-stone reset @ 25c.	937 50	
512 cubic yards concrete base furnished and laid @ \$9	4,608 00	
768 square yards existing granite block paving relaid, gravel joints, @ \$1	768 00	
3,073 square yards granite block paving furnished and laid, cement sand bed, grout joints, @ \$3.70	11,370 10	
844 square yards existing brick sidewalks relaid @ 40c.	337 60	
30,057 square feet artificial stone sidewalks furnished and laid @ 23c.	6,913 11	
28 covers reset @ \$3	84 00	
Extra work—Cut concrete around Boston Elevated columns.		
119 hours, stonecutter, @ 90c.	107 10	
74 hours' labor, @ 45c.	33 30	
Plus 15 per cent on \$140.40	21 06	
Extra work—Remove stumps on line of edge-stone.		
45 hours' labor @ 45c.	20 25	
Plus 15 per cent on \$20.25	3 04	
Extra work—Reset Bradley-Head catch-basin:		
8 hours, mason, @ 75c.	6 00	
16 hours, helper, @ 50c.	8 00	
Plus 15 per cent on \$14	2 10	
2 bags cement @ 81½c.	1 63	
Extra work—Reset granite retaining wall at No. 300:		
5 hours, mason, @ 75c.	3 75	
5 hours, helper, @ 50c.	2 50	
<i>Carried forward</i>	\$25,286 79	\$7,295 99

<i>Brought forward</i>	\$25,286 79	\$7,295 99	
Plus 15 per cent on \$2.25,	94		
2 bags cement @ 81½c.	1 63		
	<hr/>	25,289 36	
			<u><u>\$32,585 35</u></u>

Harvard street, from Prescott street to south side of Harvard square.
Length, 445 linear feet. Area, 1,335 square yards. Edgestone reset,
asphalt pavement laid and artificial stone sidewalks constructed.

Engineering	\$125 46
Engineering expense	2 42
Inspection	88 94
Edgestone	56 36
Teaming	9 00
	<hr/>
	\$282 18
Credit: Bricks, 20,300 second-hand	142 10
	<hr/>
	\$140 08

Amount paid to the Bermudez Company,
under contract:

1 cubic yard rock excavation @ \$8	\$8 00	
39 linear feet circular edgestone set @ 25c.	9 75	
746 linear feet existing edgestone reset @ 23c.	171 58	
2 square yards existing granite block paving relaid, gravel joints, @ \$1	2 00	
9 square yards existing granite block paving taken up, cleaned, culled and relaid, including preparing site, gravel bed, covering sand, and grout joints, @ \$1.10,	9 90	
1,355 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation, including preparing site, @ \$1.43	1,937 65	
4,811 square feet artificial stone sidewalks furnished and laid @ 19½c.	926 12	
3 covers reset @ \$3	9 00	
	<hr/>	
	\$3,074 00	
Less five per cent retained	153 70	
	<hr/>	
		2,920 30
		<u><u>\$3,060 38</u></u>

Hawkins street, from Sudbury street to Chardon street. Area, 849 square yards. Relaid old blocks on a concrete base, with grout joints. (Work done in connection with Sudbury street.)

Engineering	\$56 25
Inspection	122 24
Labor, chemist	43 17
	<hr/>
<i>Carried forward</i>	\$221 66

<i>Brought forward</i>		\$221 66	
Amount paid to Simpson Brothers Corporation, under contract:			
326 linear feet existing edgestone reset @ 25c.	\$81 50		
14 square yards existing granite block paving relaid, gravel joints and bed @ 80c.	11 20		
849 square yards existing granite block paving relaid on 6-inch concrete base, grout joints, @ \$3.75	3,183 75		
153 square yards existing brick sidewalks relaid @ 40c.	61 20		
5 covers reset, @ \$3	15 00		
Extra work — Handle and dress old flagging as directed:			
16 hours, stonecutter, @ 75c.	12 00		
27 hours' labor @ 50c.	13 50		
Plus 15 per cent on \$25.50,	3 83		
		3,381 98	
			<u>\$3,603 64</u>
<i>Haymarket square.</i> Length, 525 linear feet. Area, 6,850 square yards. Edgestone reset, roadway paved with granite block and existing brick sidewalks relaid. (Work done in 1917.)			
Engineering		\$29 49	
Amount paid to B. E. Grant:			
Final payment on contract, work done in 1917	\$38 46		
Allowance for loss due delays, etc., as recommended by Boston Finance Commission	2,776 80		
		2,815 35	
			<u>\$2,844 84</u>
<i>India street, at Atlantic avenue.</i>			
Engineering			<u>\$19 00</u>
<i>Lincoln street, from Essex street to Beach street.</i> Length, 497 linear feet. Area, 2,400 square yards. Edgestone reset, granite block pavement and existing brick sidewalk relaid. (Work done in 1917.)			
Engineering		\$13 50	
Final payment to B. E. Grant on contract for work done in 1917	38 46		
			<u>\$51 96</u>
<i>Market street, from Washington street to Western avenue.</i> (Work not started.)			
Engineering		\$229 05	
Engineering expense	2 52		
			<u>\$231 57</u>
<i>Maverick square, from Sumner street to Maverick street.</i> Length, 510 linear feet. Area, 3,455 square yards. Edgestone reset, asphalt pavement laid and artificial stone sidewalks constructed. Unfinished work from 1918. Final payment not made.			

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Engineering	\$57 01
Engineering expense	2 58
Inspection	68 17

Amount paid to the Bermudez Company under contract:

60 linear feet circular edge-stone set @ 25c.	\$15 00	
894 linear feet existing edge-stone reset @ 23c.	205 62	
7 square yards existing granite block paving relaid, gravel joints, @ \$1	7 00	
136 square yards existing granite blocks taken up, cleaned, culled and relaid (in brows and dummy of car tracks), including preparing site, concrete base, cement sand bed and covering sand, grout joints, @ \$2.10	285 60	
257 square yards existing granite blocks taken up, cleaned, culled and relaid (in gutters and edgings), including preparing site, concrete base, cement sand bed and covering sand, grout joints, @ \$2.10	539 70	
3,062 square yards concrete base bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.53	7,746 86	
9 square yards existing brick sidewalks relaid @ 50c.,	4 50	
8,387 square feet artificial stone sidewalks furnished and laid @ 19½c.	1,614 50	
2 covers reset @ \$3	6 00	
Extra work—Reset park edgestone around Tunnel entrance:		
16 hours, foreman, @ 75c.	12 00	
55 hours, labor @ 35c.	19 25	
Plus 15 per cent on \$31.25,	4 69	
	<u>\$10,460 72</u>	
Less amount paid in 1917,	8,388 66	
	<u>\$2,072 06</u>	
Less 5 per cent of \$10,460.72	523 03	
	<u>1,549 03</u>	
Credit: Bricks, old sidewalk		\$1,676 79
		204 40
		<u>\$1,472 39</u>

Mercantile street, from South Market street to Richmond street. Length, 533 linear feet, Area, 2,563 square yards. Relaid brick sidewalks, granite block paving laid and artificial stone sidewalks constructed.

Engineering	\$164 45
Engineering expense	5 00
Inspection	174 14
Labor, making templets	18 00
Advertising	1 94
Lumber	9 44
Edgestone	55 75
Testing blocks	15 00
Teaming	10 50
Amount paid to Coleman Brothers, under contract:	
38 linear feet circular edge-stone set @ 30c.	\$11 40
558 linear feet existing edge-stone reset @ 30c.	167 40
432 cubic yards concrete base furnished and laid @ \$10	4,320 00
807 square yards existing granite block paving relaid, gravel joints, @ \$1	807 00
2,563 square yards granite block paving furnished and laid, cement sand bed, grout joints, @ \$4.15	10,636 45
18 square yards existing granite block paving relaid, cement sand bed, grout joints, @ \$1.25	22 50
35 square yards existing flagging crosswalks relaid, cement sand bed, grout joints, @ \$2	70 00
344 square yards existing brick sidewalks relaid @ 50c.,	172 00
2,082 square feet artificial stone sidewalks furnished and laid @ 25c.	520 50
9 covers reset @ \$3	27 00
Extra work—Raise sewer covers over six (6) inches:	
12 hours, mason, @ 80c.	9 60
12 hours, tender, @ 50c.	6 00
12 hours, labor @ 45c.	5 40
Plus 15 per cent on \$21	3 15
100 bricks @ \$14 per M	1 40
2 bags cement @ 75c.	1 50
Extra work—Construct new catch-basin:	
14 hours, foreman, @ 75c.	10 50
12½ hours, mason, @ 80c.	10 00
12½ hours, tender, @ 50c.	6 25
112 hours, labor @ 45c.	50 40
Plus 15 per cent on \$77.15,	11 57
6 hours, single team, @ 75c.,	4 50
1,800 bricks @ \$14 per M	25 20
20 bags cement @ 75c.	15 00
Carried forward	\$16,914 72
	<hr/> \$4541 22

<i>Brought forward</i>	\$16,914 72	\$454 22
1 10-inch bend furnished @ \$2.52	2 52	
30 linear feet 10-inch drain pipe furnished @ 63c.	18 90	
Extra work—Dress old flagging for relaying crosswalks:		
16 hours, stonecutter, @ 90c.,	14 40	
Plus 15 per cent on \$14.40,	2 16	
	<hr/>	<hr/>
	16,952 70	\$17,406 92
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<i>Merchants row</i> , from State street to South Market street. Work not started.		
Engineering		<u>\$32 00</u>
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<i>McKinley square</i> , at Custom House. Length, 360 linear feet. Area, 5,822 square yards. Edgestone reset, granite block pavement laid and existing brick sidewalks relaid. Work done in 1917.		
Engineering	\$19 78	
Final payment under contract to B. E. Grant for work done in 1917	38 46	
	<hr/>	<u>\$58 24</u>
<hr/>		
<i>Neponset avenue</i> , from Ashmont street to Chickatawbut street. Length, 1,708 linear feet. Area, 8,350 square yards. Second hand granite block paving laid. (Unfinished work from 1917.)		
Engineering	\$138 42	
Engineering expense	2 00	
Inspection	145 16	
Blocks, 21,900 old	438 00	
Labor, handling blocks	90 63	
Teaming	8 00	
Labor, loading flagging	6 00	
Amount paid to Boston Elevated Railway Company	46 79	
Amount paid to John F. Lynch, under contract:		
1,786 granite blocks paving hauled and laid, grout joints, @ \$1.08	\$1,928 88	
3,210 square yards existing granite block paving taken up, cleaned and relaid, grout joints, @ 98c.	3,145 80	
51 square yards existing flagging crosswalks taken up, cleaned and relaid, grout joints, @ 98c.	49 98	
9 covers reset @ \$3	27 00	
Extra work — Cull blocks and haul culls to Codman Street Yard:		
63 hours, foreman, @ 66½c.	42 00	
126 hours, labor @ 45c.	56 70	
Plus 15 per cent on \$98.70,	14 81	
60 hours, auto truck, @ \$3	180 00	
	<hr/>	<hr/>
<i>Carried forward</i>	\$5,445 17	\$875 00

<i>Brought forward</i>	\$5,445 17	\$875 00
Extra work — Bar up and repave dummy, with grout joints:		
101 hours, foreman, @ 66½c .	67 33	
651 hours, labor @ 45c. .	292 95	
192 hours, paver, 87½c .	168 00	
143 hours, tender, @ 56c. .	80 08	
103 hours, rammer, @ 56c. .	57 68	
Plus 15 per cent on \$666.04 .	99 91	
112 hours, single team, @ 56c.,	62 72	
30 hours, auto truck, @ \$3 .	90 00	
65 cubic yards sand @ \$2 .	130 00	
19 cubic yards pebbles @ \$3,	57 00	
124½ barrels cement @ \$2.75 .	342 38	
Less 16 hours' use of city steam roller @ \$1.87½ .	30 00	
	<u>\$6,863 22</u>	
Less amount paid in 1917,	<u>1,751 00</u>	
		<u>5,112 22</u>
		<u>\$5,987 22</u>

North Anderson street, from Parkman street to Fruit street. Length, 105 linear feet. Area, 214 square yards. Edgestone reset, brick block gutters laid, asphalt laid, pavement and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Final payment to Warren Brothers Company for work done under contract in 1917 \$32 73

North Grove street, from Cambridge street to Fruit street. Length, 456 linear feet. Area, 1,538 square yards. Reset edgestone, granite block gutters relaid, asphalt pavement laid and artificial stone sidewalk constructed. (Work done in 1917.)

Engineering	\$6 20	
Final payment to Warren Brothers Company, under contract for work done in 1917	<u>228 53</u>	
		<u>\$234 73</u>

North Russell street, from Cambridge street to Eaton square. Length, 438 linear feet. Area, 1,273 square yards. Edgestone reset, granite block gutters repaved, asphalt pavement and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$36 43
Engineering expense	15
Inspection	<u>24 93</u>

Amount paid to the Bermudez Company under contract:

15 linear feet straight edgestone and corners hauled and set @ 30c.	\$4 50
9 linear feet circular edgestone set @ 25c.	2 25
657 linear feet existing edgestone reset @ 23c.	151 11
33 square yards existing granite block paving relaid, gravel joints, @ \$1	<u>33 00</u>

<i>Carried forward</i>	<u>\$190 86</u>	<u>\$61 51</u>
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<i>Brought forward</i>	\$190 86	\$61 51
257 square yards existing granite blocks cleaned, culled and relaid, including concrete base, cement sand bed, covering sand, grout joints (in gutters and edgings), @ \$2.10 .	539 70	
1,016 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.53 .	2,570 48	
7 square yards existing brick sidewalks relaid @ 50c.,	3 50	
4,253 square feet artificial stone sidewalks furnished and laid @ 19½c. .	818 70	
8 covers reset @ \$3 .	24 00	
Extra work — Unload and pile blocks at Barton street:		
93 hours' labor @ 35c. .	32 55	
Plus 15 per cent on \$32.55,	4 88	
	<u>\$4,184 67</u>	
Less amount paid in 1917,	3,171 55	
	<u>\$1,013 12</u>	
Less 5 per cent retained .	209 23	
		<u>803 89</u>
		<u>\$865 40</u>
Credit: Bricks, old sidewalk		74 63
		<u>\$790 77</u>
<i>Park street, from Tremont street to Beacon street. Length, 482 linear feet. Area, 1,854 square feet. Reset edgestone, Filbertine roadway constructed, granite block gutters repaved, granite block paving laid and artificial stone sidewalks constructed. Unfinished work from 1917.</i>		
Engineering	\$97 60	
Engineering expense	30	
Inspection	171 39	
Advertising	2 00	
Testing blocks	90 00	
Edgestone	12 30	
Labor, making templets	8 00	
Lumber	10 08	
Teaming	6 00	
	<u>\$397 67</u>	
Credit: Bricks, old sidewalk	45 50	
	<u>\$352 17</u>	
Amount paid to Warren Brothers, under contract:		
11 linear feet straight edgestone and corners hauled and set @ 50c.	\$5 50	
<i>Carried forward</i>	<u>\$5 50</u>	<u>\$352 17</u>

<i>Brought forward</i>	\$5 50	\$352 17
91 linear feet existing edge-stone reset @ 30c.	27 30	
145 cubic yards concrete base furnished and laid @ \$10	1,450 00	
558 square yards granite block paving furnished and laid, pitch joints, @ \$5.05	2,817 90	
156 square yards granite block paving furnished and laid, grout joints, @ \$4.95	772 20	
169 square yards granite block paving taken up, cleaned hauled, piled and relaid, grout joints, @ \$2	338 00	
959 square yards Filbertine wearing surface furnished and laid on macadam foundation @ \$2.14	2,052 26	
2,713 square feet artificial stone sidewalks furnished and laid @ 32c.	868 16	
6 covers reset @ \$3	18 00	
	<hr/>	8,349 32

Final payment to B. E. Grant for work done under his contract in 1917	100 00	
	<hr/>	<u>\$8,801 49</u>

Parkman street, from North Anderson street to North Grove street. Length, 172 linear feet. Area, 495 square yards. Edgestone reset, brick block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$6 91	
Final payment to Warren Brothers Company, under contract, in 1916 and 1917	70 04	
	<hr/>	<u>\$76 95</u>

Portland street, from Hanover street to Causeway street. (Work not started.)

Engineering	\$180 91	
	<hr/>	<u>\$180 91</u>

Richmond street, from Hanover street to Atlantic avenue. (Work not started.)

Engineering	\$51 37	
Engineering expense	42	
	<hr/>	<u>\$51 79</u>

School street, from Washington street to Tremont street. (Work done in 1916.)

Engineering	\$1 50	
Final payment to B. E. Grant, under contract, for work done in 1916	471 79	
	<hr/>	<u>\$473 29</u>

Somerset street, from Beacon street to Ashburton place. Length, 320 linear feet. Area, 736 square yards. Reset edgestone, granite blocks laid and artificial stone sidewalks constructed.

Engineering	\$59 08
Engineering expense	30
Inspection	79 27
Advertising	2 00
Photographs	3 50
Teaming	7 50
Lumber	6 72
Labor, making templets	24 00

\$182 37

Credit: Bricks, old sidewalk 37 80

\$144 57

Amount paid to Warren Brothers Company, under contract:

177 linear feet existing edge-stone reset @ 30c.	\$53 10
123 cubic yards concrete base furnished and laid @ \$10	1,230 00
736 square yards granite block paving furnished and laid, grout joints, @ \$4.95	3,643 20
7 square yards existing brick sidewalks relaid @ 55c.	3 85
1,925 square feet artificial stone sidewalks furnished and laid at 32c.	616 00
2 covers reset @ \$3	6 00
	<hr/>
	5,552 15

\$5,696 72

South street, from Jamaica street to Arborway. Length, 1,648 linear feet. Area, 5,200 square yards. Edgestone reset, granite block gutters paved, asphalt pavement laid and granite block paving relaid, with grout joints.

Engineering	\$274 01
Engineering expense	6 72
Inspection	151 27
Labor, catch-basins	77 60
Labor	3 00
Blocks	66 00
Edgestone	27 12
Flagging	25 20
Teaming	12 00

Amount paid to the Bermudez Company, under contract:

796 linear feet existing edge-stone reset @ 23c.	\$183 08
41 square yards existing granite block paving relaid, gravel joints, @ \$1	41 00
	<hr/>

Carried forward \$224 08

\$642 92

<i>Brought forward</i>	\$224 08	\$642 92
31 square yards existing flag- ing crosswalks relaid, gravel joints, @ \$1.40 .	43 40	
1 cover reset @ \$3 .	3 00	
Extra work — Omit con- crete base and lay gran- ite blocks on gravel bed, with grout joints:		
1,364 square yards existing granite block paving re- laid, grout joints, @ \$1.10	1,500 40	
42 square yards granite block paving hauled and laid, grout joints, @ \$1.50 .	63 00	
Extra work — Omit con- crete base and lay bitu- minous concrete binder and asphalt wearing sur- face on macadam foundation:		
3,891 square yards bituminous concrete binder and as- phalt wearing surface furnished and laid @ \$1.43	5,564 13	
	<u>\$7,398 01</u>	
Less amount retained, 5 per cent	369 90	
	<u>7,028 11</u>	<u>\$7,671 03</u>

Sudbury street, from Court street to Merrimac street. Length, 870 linear feet. Area, 2,338 square yards. Reset edgestone, granite block paving laid and artificial stone sidewalks constructed.

Engineering	\$486 47
Engineering expense	1 21
Inspection	313 08
Advertising	5 40
Labor, making templets	14 00
Lumber	16 73
Blocks	221 00
Teaming	3 00
Edgestone	178 33
Testing blocks	90 00
	<u>\$1,329 22</u>
Credit: Bricks, old sidewalk	19 25
	<u>\$1,309 97</u>
Amount paid to Simpson Brothers, under con- tract:	
106 linear feet straight edge- stone and corners hauled and set @ 50c.	\$53 00
35 linear feet circular edge- stone set @ 40c.	14 00
621 linear feet existing edge- stone reset @ 25c.	155 25
	<u>\$222 25</u>
<i>Carried forward</i>	\$1,309 97

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<i>Brought forward</i>	\$222 25	\$1,309 97
510 cubic yards concrete base furnished and laid @ \$9.80	4,998 00	
367 square yards existing granite block paving relaid, gravel joints, @ 80c.	293 60	
2,838 square yards granite block paving furnished and laid, grout joints, @ \$4.25	12,061 50	
573 square yards existing granite block paving relaid, grout joints, @ \$1.60	916 80	
24 square yards existing flagging crosswalks relaid, grout joints, @ \$1.60	38 40	
56 square yards existing brick sidewalks relaid @ 40c.,	22 40	
5,545 square feet artificial stone sidewalks furnished and laid @ 28c.	1,552 60	
7 covers reset @ \$3	21 00	
Extra work — Relay granite block paving, grout joints, on 6-inch concrete base, reset edge-stone and relay brick sidewalks on Hawkins street, from Sudbury street to Chardon street.		
Extra work — Haul culls to Medford street and haul second-hand block from Willard street:		
212 square yards blocks hauled @ 60c.	127 20	
Extra work — Haul and lay granite blocks on gravel base with grout joints, as directed in Sudbury square.		
239 square yards granite block paving hauled and set, grout joints, @ \$2	478 00	
2 covers set @ \$3	6 00	
	<u>20,737 75</u>	<u>\$22,047 72</u>
<i>Talbot avenue</i> , from Dorchester avenue to Welles avenue. (Work not started.)		
Engineering	\$35 00	<u>\$35 00</u>
<i>Tremont street</i> , from Boylston street to Common street. (Work done in 1917, except artificial stone sidewalks.)		
Engineering	\$184 97	
Inspection	72 08	
	<u>\$257 05</u>	
<i>Carried forward</i>		

<i>Brought forward</i>	\$257 05	
Advertising	2 00	
Amount paid to Boston Elevated Railway Company	578 29	
Final payment to B. E. Grant for work done under contract in 1917	100 00	
Amount paid to Warren Brothers under contract:		
4,323 square feet artificial stone sidewalks furnished and laid @ 32c.	1,383 36	
	<u>\$2,320 70</u>	
Credit: Bricks, old sidewalk	61 25	
		<u>\$2,259 45</u>
<i>Tremont street, from Hammond street to Station street. (Work not started.)</i>		
Engineering	\$352 73	
Engineering expense	6 44	
		<u>\$359 17</u>
<i>Washington street, from 78 feet south of Court avenue to Beach street. Length, 2,814 linear feet. Area, 7,311 square yards. Reset edge-stone, wood block paving laid and brick sidewalks relaid. (Work done in 1917.)*</i>		
Engineering	\$31 80	
Engineering expense	20	
Final payment, under contract, to B. E. Grant, for work done in 1917	427 40	
		<u>\$459 40</u>
<i>Washington street, from Haymarket square to Elin street. (Work done in 1917, except artificial stone sidewalks.)</i>		
Engineering	\$52 13	
Engineering expense	56	
Inspection	74 79	
Advertising	1 75	
Final payment to B. E. Grant, under contract for work done in 1917	\$141 67	
Allowance due to delay, etc., as recommended by Boston Finance Commission	1,350 70	
		1,492 37
Amount paid to V. Grande, under contract:		
5,472 square feet artificial stone sidewalks furnished and laid @ 21c.	1,149 12	
	<u>\$2,770 72</u>	
Credit: Bricks, old sidewalk	\$4 90	
Blocks, old paving	280 00	
		284 90
		<u>\$2,485 82</u>
<i>Washington street, from Brattle street, across Elm street. Repaved with granite blocks on a concrete base, with grout joints, 433 square yards and crosswalks relaid, 20 square yards.</i>		
Inspection	\$12 47	
Cement	150 30	
<i>Carried forward</i>	\$162 77	

<i>Brought forward</i>	\$162 77
Crushed stone	85 50
Gravel	46 41
Fuel	16 50
Labor, roadway excavating	123 95
Labor, roadway paving	161 17
Labor, roadway grouting	16 50
Labor, crosswalk repaving	10 00
Labor, concrete base	45 22
Blocks, 3,250 @ 85c	276 25
Teaming	94 00

\$1,038 27

Credit: Blocks, old granite 165 00

\$873 27

Washington street, from Talbot avenue to Ashmont street, extended to Armandine street. Length, 2,035 linear feet. Area, 9,364 square yards. Edgestone reset, Topeka pavement laid, granite block gutters laid and artificial stone sidewalks constructed.

Engineering	\$208 92
Engineering expense	4 89
Inspection	164 58
Advertising	6 00

\$384 39

Credit: Bricks, old sidewalk 164 50

\$219 89

Amount paid to Warren Brothers, under contract:

1,310 linear feet existing edge-stone reset @ 33c.	\$432 30
25 square yards existing granite block paving relaid, gravel joints, @ \$1	25 00
321 square yards existing granite block paving relaid, grout joints for brows, @ \$1.93	619 53
34 square yards existing granite block paving relaid, with grout joints for edgings, @ \$1.75	59 50
6,156 square yards Topeka wearing surface furnished and laid on macadam foundation @ \$2.04	12,558 24
5 square yards existing brick sidewalks relaid @ 55c.	2 75
11,042 square feet artificial stone sidewalks furnished and laid @ 35c.	3,864 70
361 square feet artificial stone driveways furnished and laid @ 38c.	137 18

<i>Carried forward</i>	\$17,699 20	\$219 89
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<i>Brought forward</i>	\$17,899 20	\$219 89
7 covers reset @ \$3	21 00	
3 covers reset (one course of brickwork) @ \$3.50,	10 50	
1 cover reset (Bradley Head) @ \$5	5 00	
Extra work — Grade and roll approaching streets where directed:		
11 hours, foreman, @ 75c.	8 25	
129 hours' labor @ 50c.	60 00	
Plus 15 per cent on \$68.25,	10 24	
3 hours, double team, @ \$1	3 00	
11 hours, single team, @ 75c.	8 25	
3 hours, auto truck, @ \$3,	9 00	
	<hr/>	
	17,834 44	
		<hr/> <u>\$18,054 33</u>

West Broadway, from Dorchester avenue to E street. Length, 2,598 linear feet. Area, 11,572 square yards. Brick block gutters laid, asphalt pavement laid. (Work done in 1917.)

Engineering	\$39 48	
Final payment to Warren Brothers Company, under contract, for work done in 1917	1,723 77	
	<hr/>	
		<u>\$1,763 25</u>

West Canton street, from Tremont street to Berkeley street. (Work done in 1916.)

Final payment on contract with Warren Brothers Company, for work done in 1916		280 04
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STREETS CONSTRUCTED OR IN THE PROCESS OF CONSTRUCTION UNDER CHAPTER 393 OF THE ACTS OF 1906, AND THE COST CHARGED TO TO THE APPROPRIATION FOR HIGHWAYS, MAKING OF.

Alger Street, from Dorchester avenue to New York, New Haven & Hartford Railroad. Length, 549 linear feet. Area, 3,050 square yards. Filling furnished and placed. (Unfinished work from 1917.)

Engineering	\$163 72	
Engineering expense	8 70	
Inspection	494 26	
Photographs	8 00	
Amount paid to Frank J. Hannon, under contract:		
3,286 cubic yards filling furnished and placed @ 90c.	\$2,957 40	
Extra work — Remove timber which interferes with proper placing of filling:		
½ day, foreman, @ \$6	3 00	
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<i>Carried forward</i>	\$2,960 40	\$674 68

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<i>Brought forward</i>	\$2,960 40	\$674 68	
5 days' labor @ \$3.20	16 00		
Plus 15 per cent on \$19	2 85		
2 hours, double team, @ \$8,	16 00		
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	\$2,995 25		
Less amount paid in 1917,	573 75		
	<hr/>	2,421 50	
			<u>\$3,096 18</u>

Amory street (north side), from opposite east side of Bragdon street, about 384 feet westerly. Length, 384 linear feet. Area, 2,620 square feet. Artificial stone sidewalks constructed, also tree pits.

Engineering	\$22 94
Engineering expense	2 09
Inspection	59 86
Advertising	5 25
Gravel	47 25

Amount paid to Joseph A. Singarello, under contract:

2,542 square feet artificial stone sidewalks furnished and laid @ 24c.	\$610 08
78 square feet artificial stone driveways furnished and laid @ 28c.	21 84
18 linear feet existing edge-stone reset @ 60c.	10 80
1 square yard existing granite block paving relaid @ \$1	1 00
Extra work — Furnish and place loam and frame sidewalks for tree space:	
11 tree space constructed @ \$8	88 00
	<hr/>
	731 72

\$869 11

Asphalt, miscellaneous:

One paving outfit	\$3,150 00
Rental from July 14 to November 1, 1917	1,860 00
	<hr/>
	\$1,290 00

Atwill road, now Richwood street, to Park street. (Work not started.)

Engineering	\$4 00
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Augustus avenue, from Metropolitan avenue to Ethel street. (Work done in 1917.)

Engineering	\$8 63
Engineering expense	20
Final payment to M. DeMatteo for work done, under contract in 1917	496 62
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	\$505 45

Baird street, from Morton street to Blue Hill avenue. (Work not started.)

Engineering	\$4 00
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Blake street (Hyde Park boundary across Randolph road.) Length, 142 linear feet. Area, 467 square yards. Edgestone set, granite block gutter laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Final payment to Central Construction Company, under contract for work done in 1917	\$108 13	
Less 2,100 second-hand blocks @ 18c.	37 80	
		<u>\$70 33</u>

Bowdoin street, near Hendry street. Seventy-three feet edgestone set, 728 square feet artificial stone walks constructed.

Engineering	\$16 56	
Engineering expense	0 05	
Edgestone excavating	30 00	
Edgestone setting	48 00	
Teaming	49 25	
Labor, roadway excavating	65 00	
Labor, artificial stone sidewalks	92 50	
Lumber	5 49	
Cement	50 70	
Sand	12 80	
Gravel	17 44	
		<u>\$387 79</u>

Breck avenue, from Washington street to Langley road. (Work done in 1916 and 1917.)

Engineering	\$17 14	
Inspection	30	
Road oil	234 30	
		<u>\$251 74</u>
Credit: Edgestone	38 16	
		<u>\$213 58</u>

Amount paid to M. DeMatteo:

360 cubic yards earth excavation @ 75c.	\$270 00	
Removing trees, bushes, etc.	30 00	
4 cubic yards rock excavation @ \$5	20 00	
266 linear feet edgestone hauled and set @ 25c.,	66 50	
124 linear feet circular edgestone set @ 12c.	14 88	
22 linear feet existing edgestone reset @ 13c.	2 86	
765 square yards bituminous macadam surface furnished and placed @ 80c.,	612 00	
2,776 square feet artificial stone sidewalks furnished and placed @ 14c.	388 64	
66 square feet artificial stone driveways furnished and placed @ 20c.	13 20	
5 covers reset @ \$3	15 00	
		<u>\$213 58</u>
Carried forward	\$1,433 08	

<i>Brought forward</i>	\$1,433 08	\$213 58	
Extra work — Haul circular edgestone from corner Washington street to proper location:			
9 hours' labor @ 37c.	3 33		
Plus 15 per cent on \$3.33,	50		
3 hours, double team, @ 78c.,	2 34		
Extra work — Grade approaches at Crescent avenue and Washington street:			
13½ hours, foreman, @ 55c.	7 43		
75 hours' labor @ 40c.	30 00		
Plus 15 per cent on \$37.43,	5 61		
9 hours, double team, @ 75c.,	6 75		
	<u>\$1,489 04</u>		
Less amount paid in 1917	\$413 87		
Less amount retained	35 72		
	<u>449 59</u>		
		1,039 45	
		<u>\$1,253 03</u>	
<i>Brunswick street, from Blue Hill avenue to Normandy street. Length, 639 linear feet. Area, 1,852 square yards. Edgestone set, gutters repaved, roadway paved with asphalt and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)</i>			
Engineering		\$0 75	
Final payment to Central Construction Company, under contract for work done in 1916 and 1917		29 42	
		<u>\$30 17</u>	
<i>Burlington avenue, from Brookline avenue 501 feet northwesterly. (Work not started.)</i>			
Engineering		<u>\$3 00</u>	
<i>Cameron street, from Hancock street 530 feet southerly. (Work not started.)</i>			
Engineering		\$43 00	
Engineering expense		20	
		<u>\$43 20</u>	
<i>Carmel street, from Tremont street to Delle avenue. Length, 250 linear feet. Area, 722 square yards. Edgestone set, bitulithic pavement laid and artificial stone sidewalks constructed.</i>			
Engineering		\$33 25	
Engineering expense		1 93	
Inspection		135 29	
Blocks		67 50	
Edgestone, 100 feet straight, 27 feet 10 inches circular and 1 guttermouth		165 37	
Labor, chemist		3 33	
Labor, handling stock		1 50	
		<u>\$408 17</u>	
<i>Carried forward</i>			

<i>Brought forward</i>	\$408 17
Credit: Flagging	18 24
	<hr/>
	\$389 93

Amount paid to Warren Brothers Company,
under contract:

Removing trees, bushes, etc.	\$25 00	
279 cubic yards earth excavation @ \$1.25	348 75	
100 linear feet straight edge-stone and corners hauled and set @ 50c.	50 00	
29 linear feet circular edge-stone set @ 35c.	10 15	
302 linear feet existing edge-stone reset @ 30c.	90 60	
116 square yards granite block paving hauled and laid, concrete base, @ \$3	348 00	
35 square yards existing granite block paving relaid, concrete base, @ \$2.50,	87 50	
599 square yards concrete base and bitulithic wearing surface furnished and laid @ \$2.50	1,497 50	
13 square yards existing brick sidewalks relaid @ 50c.,	6 50	
2,573 square feet artificial stone sidewalks furnished and laid @ 20c.	514 60	
43 square feet artificial stone driveways furnished and laid @ 23c.	9 89	
2 covers reset @ \$3	6 00	
	<hr/>	
	2,994 49	
	<hr/>	
		\$3,384 42

Caspian way, from Savin Hill avenue 520 feet northerly. (Work done in 1917.)

Engineering	\$10 71	
Final payment to Martino De Matteo for work done in 1917, under contract	1,080 60	
	<hr/>	
		\$1,091 31

Cedric street, from Magazine street to Langdon street. Length, 616 linear feet. Area, 1,369 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Final payments to Central Construction Company for work done in 1917, under contract	\$35 06
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Centerville Park, from Upland avenue to Brunswick street. Length, 517 linear feet. Area, 2,219 square yards. Edgestone set, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$3 23	
Final payment to Central Construction Company for work done in 1916 and 1917, under contract	87 73	
	<hr/>	
		\$90 96

Centre street, from South street to Spring street. (Work not started.)

Engineering \$185 61

Chelsea street, from Foss street to Adams street. (Work not started.)

Engineering expense \$1 25

Clarendon street, from Stuart street to Boylston street. (Work not started.)

Engineering \$3 00

Cliffmont street, from Canterbury street to 1,120 feet southerly. Length, 1,151 linear feet. Area, 3,358 square yards. Macadam pavement laid, edgestone reset and artificial stone sidewalks constructed on west side. (Unfinished work from 1917.)

Engineering \$188 81

Engineering expense 7 64

Inspection 392 83

Labor, handling stock 10 29

Road oil, 8,530 gallons 1,023 60

Edgestone, 545 feet straight 384 32

Amount paid to Martin DeMatteo, under contract:

Removing trees, bushes, etc. \$85 00

1,100 cubic yards earth excavation @ \$1 1,100 00

23½ cubic yards water box excavation @ \$5 117 50

2½ cubic yards rock excavation @ \$3 7 50

1,277 linear feet straight edgestone and corners hauled and set @ 30c. 383 10

88 linear feet existing edgestone reset @ 18c. 15 84

7 square yards existing granite block paving relaid, gravel joints, @ 50c. 3 50

3,337 square yards bituminous macadam surface furnished and placed @ 99c. 3,303 63

6,986 square feet artificial stone sidewalks furnished and laid @ 19c. 1,327 34

314 square feet artificial stone driveways furnished and laid @ 25c. 78 50

\$7,421 91

Less 15 per cent retained . . . \$1,113 28

Less amount paid in 1917, 459 00

1,572 28

5,849 63

\$7,857 12

Conley street, from Old Colony avenue to Tenean street. Length, 473 linear feet. Area, 1,367 square yards. Filling furnished and placed. (Unfinished work from 1917.)

Engineering	\$116 75	
Engineering expense	1 65	
Inspection	123 90	
Labor, grading	88 41	
Amount paid to D. M. Biggs & Co., under contract:		
2,200 cubic yards filling furnished and placed @ 95c.	\$2,090 00	
Less 15 per cent retained	\$313 50	
Less amount paid in 1917	969 00	
	<hr/> 1,282 50	
		807 50
		<hr/> <u>\$1,138 21</u>

Cornell street, from Orange street to Colberg avenue. Length, 1,437 linear feet. Area, 4,151 square yards bituminous macadam roadway, granite edgestone and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$32 73	
Amount paid to Martino DeMatteo, under contract:		
4,558 cubic yards earth excavation @ 75c.	\$3,418 50	
28 cubic yards rock excavation @ \$5	140 00	
2,434 linear feet straight edgestone and corners hauled and set @ 25c.,	608 50	
82 linear feet circular edgestone set @ 12c.,	9 84	
182 linear feet existing edgestone reset @ 13c.	23 66	
1,282 linear feet crushed stone and concrete foundation furnished and placed @ 14c.	179 48	
85 square yards existing granite block paving relaid @ 45c.	38 25	
69 square yards existing flagging crosswalks relaid @ 45c.	31 05	
4,071 square yards bituminous macadam surface furnished and placed @ 80c.	3,256 80	
16,204 square feet artificial stone sidewalks furnished and laid @ 14c.,	2,268 56	
252 square feet artificial stone driveways furnished and laid @ 20c.,	50 40	
17 covers reset @ \$3	51 00	
Extra work — Reset 5 manhole covers over 6 inches:		
9 hours, foreman, @ 55c.,	4 95	
<i>Carried forward</i>	<hr/> \$10,080 99	<hr/> \$32 73

<i>Brought forward</i>	\$10,080 99	\$32 73
20 hours, mason, @ 75c.	15 00	
11 hours, tender, @ 40c.	4 40	
64 hours' labor @ 40c.	25 60	
Plus 15 per cent on \$49.95	7 49	
1½ hours, double team, @ 75c.	1 13	
1,200 brick @ \$15 M.	18 00	
4 barrels cement @ \$2.50	10 00	
1½ double load sand @ \$2.50,	3 75	
Extra work — Grade approaches as directed:		
12 hours, foreman, @ 55c.	6 60	
47½ hours' labor @ 40c.	19 00	
Plus 15 per cent on \$25.60	3 84	
9 hours, double team, @ 75c.	6 75	
Extra work — Re-excavate edge-stone trench and furnish additional crushed stone and gravel on account of trench being filled by Water Service:		
9 hours, foreman, @ 55c.	4 95	
70 hours' labor @ 35c.	24 50	
Plus 15 per cent on \$29.45	4 42	
8 hours, double team, @ 75c.	6 00	
8 tons crushed stone @ \$1.75	14 00	
4 double loads gravel @ \$2.50	10 00	
Extra work — Furnish watchman and lights at night for holes left in street by Water Division:		
246 hours, watchman, @ 35c.,	86 10	
Plus 15 per cent on \$86.10	12 92	
21 nights, lighting, @ 25c.	5 25	
Extra work — Bar and ram sewer trench:		
43 hours, foreman, @ 50c.,	21 50	
181½ hours' labor @ 35c.	63 53	
6 hours, watchman, @ 35c.,	2 10	
Plus 15 per cent on \$87.13	13 07	
22 hours, double team, @ 75c.	16 50	
	<hr/>	
	\$10,487 39	
Less amount paid in 1916-17	8,217 37	
	<hr/>	
	\$2,270 02	
Amount retained	35 72	
	<hr/>	
	2,234 30	
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	\$2,267 03	

Cummings road, from Commonwealth avenue to 835 feet easterly. Length, 903 linear feet. Area, 2,714 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed.

Engineering	\$1 75	
Engineering expense	15	
Final payment to Central Construction Company, under contract for work done in 1917	592 05	
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	\$593 95	
Less 8,650 second-hand granite blocks delivered to contractor @ \$18	155 70	
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		<u>\$438 25</u>

Dana avenue footway, from Dana avenue to Eastern avenue. Artificial stone walls, steps and walks constructed.

Amount paid to James Doherty, under contract. Furnish all labor, tools and materials necessary for building artificial stone walls, steps, platforms and walks	\$2,750 00
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Deer street, from Roach street to Melvinside terrace. Ninety feet straight edgestone set, 8-foot 6-inch circular edgestone set, gutter paved in part, crosswalk relaid and roadway partly graded. (Work unfinished.)

Engineering	\$41 00	
Engineering expense	1 40	
Edgestone, 90 feet straight and 8 feet 6 inches circular	121 31	
Gravel	20 80	
Bricks	6 30	
Labor, edgestone excavating	38 00	
Labor, edgestone reset	19 00	
Labor, gutter repaving	28 50	
Labor, crosswalk, relaid	9 50	
Labor, roadway grading	12 00	
Labor, handling stock	8 00	
Labor, stonecutter	16 00	
Teaming	13 00	
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		<u>\$334 81</u>

Downer avenue, from DeWolf street to Sawyer avenue. (Work done in 1917.)

Payment to Martino DeMatteo for work done in 1917, under contract	\$989 20	
Engineering	25 63	
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		<u>\$1,014 83</u>

Dunbar avenue, from Washington street westerly. (Work not started.)

Engineering	\$70 53	
Engineering expense	3 30	
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		<u>\$70 83</u>

East First street, from West First street to H street. (Work done in 1916.)

Engineering	\$8 00
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Epping street, from Washington street to Norfolk street. Length, 241 linear feet. Area, 556 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Final payment to Central Construction Company, for work done under contract	<u>\$124 42</u>
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Eric avenue, from Savin Hill avenue to 344 feet northerly. Length, 237 linear feet. Area, 1,261 square yards. Edgestone set, roadway paved with asphalt and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Final payment to Central Construction Company, for work done in 1916 and 1917, under contract	<u>\$30 49</u>
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Everton street, from Geneva avenue to Olney street. Length, 690 linear feet. Area, 2,026 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.

Engineering	\$13 23
Engineering expense	20
Final payment to Central Construction Company for work done in 1916 and 1917, under contract	<u>189 02</u>
	<u>\$202 45</u>

Fordham road, from Commonwealth avenue to Brighton avenue. Length, 624 linear feet. Area, 1,803 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$1 74
Engineering expense	15
Amount paid to Central Construction Company, under contract:	
906 cubic yards earth excavation @ 74c.	\$670 44
5 cubic yards rock excavation at \$6	30 00
1,018 linear feet straight edgestone and corners hauled and set @ 23c.	234 14
41 linear feet circular edgestone set @ 15c.	6 15
8 linear feet existing edgestone reset @ 15c.	1 20
10 square yards granite block paving hauled and laid, including concrete base, grout joints, @ \$1.60	16 00
23 square yards existing granite block paving relaid, including concrete base, grout joints, @ \$1.50	34 50
1,481 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.05	<u>3,036 05</u>
Carried forward	<u>\$4,028 48</u>
	<u>\$1 89</u>

<i>Brought forward</i>	\$4,028 48	\$1 89
3,194 square feet artificial stone sidewalks furnished and laid @ 14½c.	471 12	
66 square feet artificial stone driveways furnished and laid @ 14½c.	9 74	
8 covers reset @ \$3	24 00	
Extra work — Omit the furnishing and laying of brick block gutters and substitute the furnishing and laying of second-hand granite block gutters:		
340 square yards concrete base and second-hand granite block gutters furnished and laid @ \$2	680 00	
Extra work — Omit the setting of edgestone and remove edgestone already set where directed on account of change in construction:		
185 linear feet straight edgestone hauled @ 13c.	24 05	
4½ days, edgestone setter, @ \$6	26 25	
21 days' labor @ \$2.80	58 80	
Plus 15 per cent on \$85.05,	12 76	
8½ days, double team, @ \$7	61 25	
Extra work — Omit artificial stone sidewalks and substitute artificial stone driveways as directed:		
3,681 square feet artificial stone driveways furnished and laid @ 19½c.	727 00	
	<u>\$6,123 45</u>	
Less 11,250 second-hand granite block delivered to contractor @ \$18 M.,	202 50	
	<u>\$5,920 95</u>	
Less amount paid in 1917,	<u>5,500 98</u>	
		<u>419 97</u>
		<u><u>\$421 86</u></u>

Fuller street, from Commonwealth avenue to Brookline line. Length 145 feet. Area, 547 square yards. Water bound macadam roadway 6 inches deep built and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$24 94
Engineering expense	1 48
Inspection	25 93
Advertising	2 90
Gravel	46 16
<i>Carried forward</i>	<u>\$101 41</u>

<i>Brought forward</i>		\$101 41
Cement		1 95
Crushed stone, 175.3 tons		394 53
Blocks, 2,871 old granite		57 42
Edgestone, 206 feet straight, 15 feet 7 inches circular and 3 small corners		324 82
Teaming		314 25
Steam roller, parking		77 00
Steam roller, rolling		70 00
1,819 square feet artificial stone sidewalks furnished and laid, not including excavation and preparing site, @ 19c.	\$345 61	
238 square feet artificial stone driveways furnished and laid @ 22c.	52 36	
		397 97
Labor, edgestone excavating		38 00
Labor, edgestone setting		47 38
Labor, brick walk excavating		4 00
Labor, brick walk relaying		19 00
Labor, gutter excavating		54 75
Labor, gutter paving		42 87
Labor, roadway excavating		182 50
Labor, roadway, spreading stone		148 67
Labor, crosswalk excavating		3 00
Labor, crosswalk laying		7 00
		<u>\$2,286 52</u>

Gaffney street, from Commonwealth avenue to Boston & Albany Railroad. Length, 779 linear feet. Area, 4,374 square yards. Edgestone set, granite block gutters paved, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Final payment to Central Construction Company, under contract for work done in 1916 and 1917	\$267 63
Less 13,100 second-hand granite blocks delivered to contractor at \$18 per M.	235 80
	<u>\$31 83</u>

Glencoe street, from North Beacon street to Garden street. Length, 763 linear feet. Area, 2,212 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$1 49
Engineering expense	10
Payment to Central Construction Company for work done in 1917, under contract	\$495 48
Less 12,350 second-hand granite blocks delivered to contractor @ \$18 per M.	222 30
	<u>273 18</u>
	<u>\$274 77</u>

Goodale road, from Blue Hill avenue about 630 feet northwesterly. Length, 627 linear feet. Area, 1,905 square yards. Granite block gutters paved, concrete wall and fence built and macadam roadway laid. (Unfinished work from 1917.)

Engineering	\$329 15	
Inspection	280 09	
Engineering expense	5 12	
Advertising	10 75	
Teaming	50 02	
Blocks, 7,100 old granite @ \$20 M.	142 00	
Edgestone, 566 feet 9 inches straight, 2 small corners and 48 feet 7½ inches circular	757 04	
Amount paid to William J. Rafferty, under contract:		
Removing trees, etc.	\$25 00	
568 cubic yards earth excavation @ \$1.10	624 80	
566 linear feet straight edge- stone and corners hauled and set @ 30c.	169 80	
49 linear feet circular edge- stone set @ 30c.	14 70	
33 linear feet existing edge- stone reset @ 30c.	9 90	
174 square yards granite block paving, with grout joints, on gravel base, hauled and laid, @ \$1.45	252 30	
15 square yards existing gran- ite block paving relaid, with grout joints, on gravel base, @ \$1	15 00	
4,700 square feet artificial stone sidewalks furnished and laid @ 29c.	1,363 00	
70 square feet artificial stone driveways furnished and laid @ 32c.	22 40	
8 covers reset @ \$3	24 00	
Constructing wall and fence	750 00	
Extra work—Remove the stumps at the north- westerly end of the street and lower and trim the edgestone at the Well- ington Hill Garage:		
34 hours' labor @ 45c.	15 30	
5 hours, edgestone setter, @ 75c.	3 75	
16 hours, stonecutter, @ 75c., Plus 15 per cent on \$31.05,	12 00	
4 hours, double team, @ \$1,	4 66	
Extra work—Regulate the sewer covers, where directed:	4 00	
12½ hours' labor @ 45c.	5 63	
14 hours, mason, @ 75c.	10 50	
14 hours, tender, @ 50c.	7 00	
Plus 15 per cent on \$23.13,	3 47	
600 sewer bricks @ \$18 per M.	10 80	
12 bags Portland cement @ 75c.	9 00	
14 cubic feet sand @ 7c.	98	
Carried forward	\$3,357 99	\$1,574 17

<i>Brought forward</i>	\$3,357 99	\$1,574 17	
Extra work—Omit the bituminous macadam surface and substitute the furnishing and laying of water-bound macadam.			
1,629 square yards water-bound macadam furnished and laid @ \$1.50	2,443 50		
		5,801 49	
			<u>\$7,375 66</u>
<i>Gove street</i> , from Cottage street to Venice street. Length 428 linear feet. Area, 1,753 square yards. Edgestone reset, granite block gutters repaved, topeka pavement laid and brick sidewalks constructed.			
Engineering		\$61 00	
Engineering expense		55	
Inspection		68 70	
Labor, chemist		2 33	
Bricks, sidewalk 21,900		372 30	
		\$504 88	
Credit: Cement bags returned		139 32	
		\$365 56	
Amount paid to Warren Brothers, under contract:			
291 cubic yards earth excavation @ \$1.25	\$363 75		
80 cubic yards filling furnished @ \$1.25	100 00		
622 linear feet straight edgestone and corners hauled and set @ 30c.	186 60		
87 linear feet circular edgestone set @ 25c.	21 75		
15 linear feet existing edgestone reset @ 22c.	3 30		
8 square yards existing granite block paving relaid, gravel joints, @ \$1	8 00		
194 square yards granite block paving, hauled and laid, concrete base, grout joints, @ \$2.30	446 20		
19 square yards existing granite block paving relaid, concrete base, grout joints, @ \$2	38 00		
1,552 square yards concrete base and topeka wearing surface furnished and laid @ \$1.99	3,088 48		
605 square yards brick sidewalks laid @ 35c.	211 75		
9 covers reset @ \$3	27 00		
	\$4,494 83		
Less amount paid in 1917,	2,377 20		
		2,117 63	
			<u>\$2,483 19</u>

Granada avenue, from Metropolitan avenue to Ethel street. (Work done in 1916 and 1917.)

Engineering	\$7 18	
Payment to Martino DeMatteo, for work done in 1916 and 1917, under contract	461 43	
		<u>\$468 61</u>

Greenview street, from Centre street 219 feet southeasterly. (Work not started.)

Engineering	\$8 00	
		<u>\$8 00</u>

Grove street, from Centre street to Washington street. Length, 3,106 linear feet. Area, 15,920 square yards. Excavating. (Work unfinished.)

Engineering	\$1,267 13	
Engineering expense	22 60	
Inspection	1,673 97	
Amount paid to Central Construction Company, under contract:		
17,000 cubic yards earth and rock excavation @ 1.75, \$29,750 00		
Less 5 per cent retained	1,487 50	
	<u>28,262 50</u>	
		<u>\$31,226 20</u>

Halifax street, from South Huntington avenue to Pond View street. (Work not done.)

Edgestone, 44 feet 6 inches straight	\$56 07	
		<u>\$56 07</u>

Harvard street, from Fabyan street to Brookview street.

Engineering	\$48 00	
Engineering expense	42	
		<u>\$48 42</u>

Harvard street, from Morton street to Deering road.

Engineering	\$15 99	
Engineering expense	25	
Gravel, 119 cubic yards	177 72	
Crushed stone, 878.6 tons	1,976 85	
Filling, 375 cubic yards	187 50	
Teaming	379 21	
Labor, edgestone excavating	42 89	
Labor, edgestone setting	6 25	
Labor, gutter excavating	19 16	
Labor, gutter paving	21 99	
Labor, macadam excavating	45 94	
Labor, macadam spreading	39 95	
Labor, crushed stone sidewalks	43 00	
Labor, blasting	5 05	
Steam roller picking	56 00	
Steam roller rolling	343 00	
Labor, roadway excavating	74 93	
Labor, roadway paving	375 08	
	<u></u>	<u>\$3,810 76</u>

Hill Top street, from Granite avenue to Hallet street. (Work done in 1916 and 1917. Final payment not made.)

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Engineering	\$22 99	
Payment to Martino DeMatteo for work done in 1916 and 1917, under contract	3,228 25	<u>\$3,251 24</u>
<i>Holden street</i> , from Columbia road westerly. (Work not started.)		
Engineering		<u>\$19 77</u>
<i>Holton street</i> , from Everett street to Antwerp street. (Work not started.)		
Engineering		<u>\$5 00</u>
<i>Homestead street</i> , from Elm Hill avenue to Humboldt avenue. Length, 1,125 linear feet. Area, 3,255 square yards. Edgestone set, asphalt roadway laid and artificial stone sidewalks constructed.		
Engineering	\$16 70	
Engineering expense	10	
Final payment to Central Construction Company, for work done under contract in 1916 and 1917	268 01	<u>\$284 81</u>
<i>Hubert street</i> , Shawmut avenue to Westminster street. Length, 455 linear feet. Area, 1,318 square yards. Edgestone set, roadway paved with asphalt, existing brick sidewalks relaid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)		
Final payment to Central Construction Company for work done in 1916 and 1917, under contract	\$30 49	
Amount paid to Central Construction Company, under contract:		
466 cubic yards earth excavation @ 55c.	256 30	
149 linear feet straight edgestone and corners, hauled and set, @ 18c.	26 82	
38 linear feet circular edgestone set @ 11c.,	4 18	
740 linear feet existing edgestone reset @ 10c.	74 00	
1,275 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60	2,040 00	
20 square yards existing brick sidewalks relaid @ 30c.	6 00	
4,705 square feet artificial stone sidewalks furnished and laid @ 12½c.	588 13	
7 covers reset @ \$3	21 00	
Extra work—Regulate catch-basins over 6 inches.		
19 hours, mason, @ 70c.	13 30	
38 hours, tender, @ 30c.	11 40	
Plus 15 per cent on \$24.70	3 71	
10 bags cement @ 50c.	5 00	
Extra work — Remove tree in sidewalk:		
6 days, foreman, @ \$5	30 00	
171 hours, rigger, @ 50c.	85 50	
123 hours, helper, @ 45c.	55 35	
133 hours' labor @ 33¼c.	44 33	
1½ days, double team, @ \$6	8 00	
1 day, auto truck, @ \$20	20 00	
	<u>\$3,325 30</u>	
Less amount paid in 1917	748 69	<u>\$2,576 61</u>

Hunnewell avenue, from Champney street to Atkins street. Edgestone set, 400 feet; 294 cubic yards excavating, 273 square yards gutters paved, 1,271 square yards water-bound macadam roadway built 5 inches deep. (Unfinished work from 1917.)

Engineering	\$37 51	
Engineering expense	1 65	
Inspection	49 86	
Sand, 20 cubic yards	21 60	
Gravel, 102 cubic yards	102 66	
Edgestone, 808 feet, 3 inches straight and 27 feet, 7 inches circular	697 51	
Blocks, 9,074 old granite	181 48	
Advertising	2 90	
Teaming	425 25	
Steam roller, rolling	91 00	
Crushed stone, 431 tons	969 97	
Amount paid to Pignat Vincenzo Mosaic Company, under contract:		
5,594 square feet artificial stone sidewalks furnished and laid, not including excavation and preparing site, @ 19c.	\$1,062 86	
150 square feet artificial stone driveways furnished and laid @ 22c.	33 00	
	<hr/>	\$1,095 86
Labor, edgestone excavating	66 25	
Labor, edgestone setting	38 50	
Labor, roadway excavating	123 91	
Labor, macadam spreading	172 25	
Labor, concrete base	56 00	
Labor, sidewalk excavating	325 39	
Labor, brick walk, repaving	17 00	
Labor, gutter excavating	87 00	
Labor, gutter paving	89 50	
Labor, crosswalk excavating	24 40	
	<hr/>	<u>\$4,677 45</u>

Justin road, from Bigelow street to Atkins street. (Work not started.)

Engineering \$3 00

Kenton road, from Washington street 800 feet easterly. (Work not started.)

Lumber \$162 45

Langley road, from Breck avenue 571 feet easterly. Length, 574 linear feet. Area, 1,677 square yards. (Work done in 1917.)

Engineering	\$8 53	
Edgestone, 53 feet	38 16	
Road oil, 4,440 gallons binder	472 86	
Amount paid to Martino DeMatteo under contract:		
9 cubic yards water box excavation @ \$5	\$45 00	
1.5 cubic yards rock excavation @ \$5	7 50	
1,115 linear feet straight edgestone corner hauled and set @ 25c.	278 75	
	<hr/>	
Carried forward	\$965 00	\$519 55

<i>Brought forward</i>	\$965 00	\$519 55
27 linear feet circular edge-stone set @ 12c.	3 24	
565 linear feet crushed stone and concrete foundation furnished and placed @ 14c.	79 10	
1,683 square yards bituminous macadam surface furnished and placed @ 80c.	1,346 40	
7,343 square feet artificial stone sidewalks furnished and placed @ 14c.	1,028 02	
8 covers reset @ \$3	24 00	
Extra work — Reset sewer manhole cover over 6 inches:		
2 hours, mason, @ 80c.	1 60	
2 hours' labor @ 40c.	80	
Plus 15 per cent on \$2.40	36	
100 brick @ \$15 per M.	1 50	
1½ bags cement @ 65c.	98	
Extra work — connect old surface drain with catch-basin:		
9 hours' labor @ 40c.	3 60	
Plus 15 per cent on \$3.60	54	
12 linear feet 6-inch drain pipe @ 25c.	3 00	
.5 cubic yards gravel @ \$1.50	75	
Extra work — grade approaches at easterly end of street:		
9 hours, foreman, @ 55c.	4 95	
57 hours' labor @ 40c.	22 80	
Plus 15 per cent on \$27.75,	4 16	
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	\$3,490 80	
Less amount paid in 1917,	1,420 38	
	<hr/>	
	\$2,070 42	
Less amount retained	35 72	
	<hr/>	
	2,034 70	
		<hr/>
		\$2,554 25

Levant street, from Geneva avenue to Topliff street. (Work not started.)

Engineering	\$92 00	
Engineering expense	70	
	<hr/>	
		\$92 70

Lithgow street, from Talbot avenue to Washington street. Length, 683 linear feet. Area, 2,036 square yards. Edgestone set, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$9 70	
Final payment to Central Construction Company, for work done in 1916 and 1917	84 84	
	<hr/>	
		\$94 54

Lorne street, from Harvard street 650 feet northerly. Length, 646 linear feet. Area, 2,248 square yards. Edgestone set, granite block gutters paved, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$34 46	
Final payment to Central Construction Company, for work done under contract in 1917,	108 95	
	<hr/>	
	\$143 41	
Less 11,250 second-hand granite blocks delivered to contractor @ \$18 per M.	133 74	
	<hr/>	
		<u>\$9 67</u>

Malverna road, from Metropolitan avenue to Ethel street. Work not started.

Engineering	<u>\$6 00</u>
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Matchett street, from Washington street 834 feet northerly. Length, 852 linear feet. Area, 2,536 square yards. Granite block gutters and asphalt pavement laid. (Work done in 1917.)

Engineering	\$14 49	
Engineering expense	30	
Amount paid to Central Construction Company:		
407 cubic yards earth excavation @ 74c.	\$301 18	
11 square yards granite block paving hauled and laid, gravel joints, @ 70c.	7 70	
2,101 square yards concrete base, bituminous concrete binder and asphalt wearing surface, furnished and laid, @ \$2.05,	4,307 05	
11 covers reset @ \$3	33 00	
Extra work—Omit furnishing and laying of brick block gutters, etc.:		
431 square yards concrete base and second-hand granite block gutters furnished and laid @ \$2	862 00	
4 days' labor @ \$3	12 00	
Plus 15 per cent on \$12	1 80	
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	\$5,524 73	
Less 12,200 second-hand granite blocks delivered to contractor @ \$18 per M.	219 60	
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	\$5,305 13	
Less amount paid in 1917,	5,140 00	
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	165 13	
		<u>\$179 92</u>

Minton street, from Amory street to Brookside avenue. Length, 422 linear feet. Area, 1,226 square yards. Reset edgestone, granite block gutters laid, Topeka pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$94 80
Engineering expense	3 20
Inspection	376 65
Labor, chemist	1 33
Labor, handling stock	10 86
Blocks, 9,200 old granite	184 00
Edgestone, 769 feet 6 inches straight, 6 small covers and 2 special cut stones	927 62
	<hr/>
Credit: Flagging, old North River	\$1,598 46
	12 99
	<hr/>
	\$1,585 47

Amount paid to Warren Brothers Company,
under contract:

Removing trees, bushes, etc.	\$20 00	
664 cubic yards earth excavation @ \$1.25	830 00	
14 cubic yards water-box excavation @ \$2	28 00	
728 linear feet straight edgestone and corners hauled and set @ 30c.	218 40	
22 linear feet circular edgestone set @ 25c.	5 50	
35 linear feet existing edgestone reset @ 22c.	7 70	
236 square yards granite block paving hauled and laid, concrete base, grout joints, @ \$2.30	542 80	
4 square yards existing block paving relaid, concrete base, grout joints, @ \$2.	8 00	
1,012 square yards concrete base and Topeka wearing surface furnished and laid @ \$1.99	2,013 88	
4,865 square feet artificial stone sidewalks furnished and laid @ 17c.	827 05	
124 square feet artificial stone driveways furnished and laid @ 19c.	23 56	
11 covers reset @ \$3	33 00	
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	4,557 89	
	<hr/>	
		\$6,143 36

Moraine street, from South Huntington avenue to Jamaica way. Length, 1,409 feet. Area, 5,522 square yards. Edgestone set and tar macadam roadway 6 inches deep built.

Engineering	\$96 84
Engineering expense	3 05
Edgestone, 2,407 feet 3 inches straight, 92 feet 6 inches circular and 10 small covers	2,147 58
Cement	1 30
Crushed stone, 1729.6 tons	3,891 71
Road oil, 2,350 gallons	306 00
Teaming	986 00
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Carried forward	\$7,432 48

<i>Brought forward</i>	\$7,432 48	
Steam roller, rolling	112 00	
Steam roller, picking	112 00	
Labor, edgestone excavating	597 77	
Labor, edgestone setting	490 29	
Labor, roadway excavating	2,014 92	
Labor, macadam spreading	1,044 13	
Labor, gutters excavating	4 25	
Labor, gutters paving	4 25	
		<u>\$11,812 09</u>

Mt. Ida road, from Robinson street to 254 feet south of Marie street.
(Unfinished.)

Engineering	\$54 44	
Engineering expenses	1 59	
Teaming	509 38	
Labor, roadway excavating	87 82	
		<u>\$653 23</u>

Museum road, from Huntington avenue to Fenway. Length, 628 linear feet. Area, 2,397 square yards. Edgestone reset, granite block gutters repaved, Topeka pavement laid and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$32 12	
Engineering expense	1 60	
Inspection	148 72	
Labor, chemist	1 00	
Edgestone	4 32	
Blocks	3 00	

Amount paid to Warren Brothers, under contract:

831 cubic yards earth excavation @ \$1.25	\$1,038 75	
1 cubic yard water box excavation @ \$2	2 00	
604 linear feet straight edgestone and corners hauled and set @ 30c.	181 20	
50 linear feet circular edgestone set @ 25c.	12 50	
631 linear feet existing edgestone reset @ 22c.	138 82	
19 square yards existing granite block paving relaid, gravel joints, @ \$1	19 00	
252 square yards granite block paving hauled and laid, concrete base, grout joints, @ \$2.30	579 60	
74 square yards existing granite block paving relaid, concrete base, grout joints, @ \$2	148 00	
2,072 square yards concrete base and Topeka wearing surface furnished and laid @ \$1.99	4,123 28	
1 brick sidewalk relaid @ 40c.	40	
<i>Carried forward</i>	<u>\$6,243 55</u>	<u>\$190 76</u>

<i>Brought forward</i>	\$6,243 55	\$190 76
8,597 square feet artificial stone sidewalks furnished and laid @ 17c.	1,461 49	
262 square feet artificial stone driveways furnished and laid @ 19c.	49 78	
Extra work — Furnish stone cutter to joints existing edgestone:		
1 day, stonecutter @ \$6	6 00	
Plus 15 per cent on \$6	90	
	<u>\$7,761 72</u>	
Less amount paid in 1917,	<u>3,411 64</u>	
		<u>4,350 08</u>
		<u><u>\$4,540 84</u></u>

Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad. Length, 1,711 linear feet. Area, 9,313 square yards. Edgestone set, concrete base and asphalt pavement laid and artificial stone sidewalks constructed. (Unfinished work from 1917.)

Engineering	\$36 46
Engineering expense	2 63
Inspection	49 86
Amount paid to Central Construction Company, under contract:	
Removing trees, bushes, stumps, etc.	\$18 00
4,038 cubic yards earth excavation @ 74c.	2,988 12
2,336 linear feet straight edgestone and corners hauled and set @ 23c.,	537 28
779 linear feet circular edgestone set @ 15c.	116 85
1,020 linear feet existing edgestone reset @ 15c.	153 00
35 square yards existing granite block paving relaid, gravel joints, @ 50c.	17 50
320 square yards existing granite block paving relaid, including concrete base, grout joints, @ \$1.50	480 00
43 square yards existing flagging crosswalks relaid, including concrete base, grout joints, @ \$1.40	60 20
8,708 square yards concrete base, bituminous concrete binder and asphalt wearing surface, furnished and laid @ \$2.05	17,851 40
34 square yards existing brick sidewalks relaid @ 30c.,	10 20
32,740 square feet artificial stone sidewalks furnished and laid @ 14½c.	4,829 15
60 covers reset @ \$3	180 00
	<u>\$27,241 70</u>
<i>Carried forward</i>	<u>\$88 95</u>

<i>Brought forward</i>	\$27,241 70	\$88 95
1,087 linear feet wood fence furnished and built @ 45c.,	489 15	
Extra work — Omit artificial stone sidewalks and substitute loam base:		
5,273 square yards loam space furnished and placed @ 75c.	3,954 75	
Extra work — Omit furnishing and laying of brick block gutters, etc.:		
605 square yards concrete base and second-hand granite block gutters furnished and laid @ \$2	1,210 00	
Extra work — Cut sheathing and puddle and ram sewer trench:		
16 hours' labor @ 37½c	6 00	
Plus 15 per cent on \$6	90	
Extra work — Haul circular edgestone as directed:		
16 hours' labor @ 37½c.	6 00	
Plus 15 per cent on \$6	90	
16 hours, double team, @ 75c.,	12 00	
Extra work — Grade approaches where directed:		
4 hours, foreman, @ 75c.	3 00	
36 hours' labor, @ 37½c.	13 50	
Plus 15 per cent on \$16.50,	2 48	
8 hours, single team, @ 50c.,	4 00	
Extra work — Place rip rap on slope to prevent washing:		
229 square yards rip rap placed @ \$1.50	343 50	
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	\$33,287 88	
Less amount paid in 1917,	22,721 63	
	<hr/>	
		10,566 25
		<hr/>
		\$10,655 20

Nevada street, from Fairmont street to Wilmington avenue. Length, 258 linear feet. Area, 975 square yards. Tar macadam roadway laid, edgestone reset and artificial stone sidewalk constructed.

Engineering	\$38 23
Engineering expense	81
Inspection	171 37
Teaming	24 00
Labor, crosswalks	6 00
Edgestone, 333 feet 1 inch straight and 18 feet 10 inches circular	424 54
Crushed stone	13 50
Road oil, 2,500 gallons tar	300 00
	<hr/>
<i>Carried forward</i>	\$978 45

<i>Brought forward</i>		\$978 45	
Amount paid to Martino DeMatteo, under contract:			
Removing trees, bushes, etc.	\$5 00		
200 cubic yards earth excavation @ \$1	200 00		
3 cubic yards rock excavation @ \$3	9 00		
400 linear feet straight edgestone and corners hauled and set @ 30c.	120 00		
18 linear feet circular edgestone set @ 18c.	3 24		
970 square yards bituminous macadam surface furnished and placed @ 98c.	950 60		
3,100 square feet artificial stone sidewalks furnished and laid @ 19c.	589 00		
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	\$1,871 84		
Less amount paid in 1917,	280 78		
	<hr/>		
		1,591 06	
		<hr/>	\$2,569 51

Normandy street, from Intervale street to Devon street. Final payment on work done in 1916.

Paid to Central Construction Company, final payment for work done in 1916, under contract	<u>\$59 82</u>
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North Beacon street, from Cambridge street to Market street. Length, 3,267 linear feet. Area, 14,500 square yards. Edgestone set and reset, bitulithic pavement laid in concrete base and artificial stone sidewalks constructed. (Work unfinished.)

Engineering	\$999 29
Engineering expense	20 16
Inspection	1,055 24
Labor, making templets	28 00
Edgestone, 3,259 feet straight, 148 feet 6 inches special, 6 small covers and 4 special cut	4,353 04
Blocks, 17,700 old blocks	637 20
Labor, handling stock	52 11
Labor, roadway digging	18 00
Advertising	6 00
Teaming	79 00
Lumber	15 96

Amount paid to Coleman Brothers, under contract:

196 cubic yards earth excavation @ 90c.	\$176 40
4 cubic yards rock excavation @ \$5	20 00
600 linear feet straight edgestone and corners hauled and set @ 25c.,	150 00

<i>Carried forward</i>	<hr/>	\$346 40	<hr/>	\$7,264 00
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<i>Brought forward</i>	\$346 40	\$7,264 00
570 linear feet straight edge- stone and corners hailed and set (un- finished) @ 10c.	57 00	
1,100 linear feet existing edge- stone reset @ 20c.	220 00	
Extra work — Move edgestone from street to vacant lot and fill in along edgestone al- ready set, etc.:		
4½ days, foreman, @ \$5	22 50	
14½ days, labor @ \$3.60	52 20	
6 days, watchman, @ \$2.50	15 00	
3½ days, double team, @ \$7,	24 50	
2 days, single team, @ \$4,	8 00	
Plus 15 per cent on \$89.70	13 46	
Premium on bond (pro- portional part)	271 00	
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	\$1,030 06	
Less amount paid in 1917,	187 00	
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		843 06
Amount paid to Warren Brothers Company, under contract:		
Removing trees, bushes, etc.	\$1,600 00	
5,000 cubic yards earth excava- tion @ \$1.50	7,500 00	
95 cubic yards rock excava- tion @ \$6	570 00	
3,237 linear feet straight edge- stone and corners hailed and set @ 35c.,	1,132 95	
550 linear feet straight edge- stone hailed and set, stored at or near line of work @ 27c.	148 50	
369 linear feet circular edge- stone set @ 35c.	129 15	
1,271 linear feet existing edge- stone reset @ 23c.	292 33	
31 square yards existing granite block paving relaid, gravel joints, @ 90c.	27 90	
383 square yards existing granite block paving relaid for brows of car tracks, concrete base, cement sand, grout joints, @ \$2.71	1,579 93	
75 square yards existing granite block paving relaid for edgings, concrete base, grout joints, @ \$2.61	195 75	
	<hr/>	
<i>Carried forward</i>	\$13,176 51	\$8,107 06

<i>Brought forward</i>	\$13,176 51	\$8,107 06
12,325 square yards bitulithic wearing surface and concrete base furnished and laid @ \$2.90	35,742 50	
43,000 square feet artificial stone sidewalks furnished and laid (incomplete cinder foundations) @ 10c.	4,300 00	
9 covers reset @ \$3	27 00	
Extra work — Lay bitulithic pavement on existing macadam foundation at Cambridge street approaches to North Beacon street:		
390 square yards bitulithic pavement 2 inches deep laid on existing macadam foundation @ \$2.04	795 60	
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	\$54,041 61	
Less 15 per cent retained,	8,106 24	
	<hr/>	
	45,935 37	
	<hr/>	<u>\$54,042 43</u>
<i>Norwood street, extended to Conley street. (Work not started.)</i>		
Engineering	\$26 00	
Engineering expense	60	
	<hr/>	<u>\$26 60</u>
<i>Orchardfield street, from Dorchester avenue to Freeport street. Length, 814 linear feet. Area, 1,270 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)</i>		
Engineering	\$2 71	
Final payment to Central Construction Company, for work done in 1916 and 1917 under contract	62 75	
	<hr/>	<u>\$65 46</u>
<i>Overland street, from Brookline avenue to Boston & Albany Railroad. Length, 399 linear feet. Area, 1,724 square yards. Edgestone set, granite block paving laid and artificial stone sidewalks constructed. (Unfinished work from 1917.)</i>		
Engineering	\$282 88	
Engineering expense	2 01	
Inspection	91 41	
Blocks, 62,495 reset granite	2,249 82	
Amount paid to James J. Coughlan Company, under contract:		
391 cubic yards earth excavation @ \$1.25	\$488 75	
18 cubic yards water box excavation @ \$0	0 00	
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<i>Carried forward</i>	\$488 75	\$2,626 12

<i>Brought forward</i>	\$488 75	\$2,626 12
676 linear feet straight edge-stone furnished and set @ \$1.25	845 00	
42 linear feet corners furnished and set @ \$2	84 00	
36 linear feet existing edge-stone reset @ 28c.	10 08	
2 square yards existing granite block paving relaid, gravel joints, @ \$2.40	4 80	
209 square yards granite block paving furnished and laid, grout joints, @ \$4.25	888 25	
3,746 square feet artificial stone sidewalks furnished and laid @ 28c.	1,048 88	
324 square feet artificial stone driveways furnished and laid @ 35c.	113 40	
6 covers reset @ \$3	18 00	
Extra work—Excavate peat below subgrade.		
5 hours, foreman, @ 73c.	3 65	
25 hours' labor @ 45c.	11 25	
Plus 15 per cent on \$14.90,	2 24	
2 hours, double team, @ 87½c.	1 75	
Extra work—Cut out old concrete foundation and grade to extra depth where directed:		
20 hours, foreman, @ 73c.	14 60	
261 hours' labor @ 45c.	117 45	
14 hours, timekeeper, @ 43c.,	6 02	
15½ hours, blacksmith, @ 50c.,	7 85	
Plus 15 per cent on \$145.92	21 89	
20 hours, double team, @ 87½c.	17 50	
Extra work—Raise man-hole covers over six inches:		
3 hours, mason, @ 75c.	2 25	
3 hours, tender, @ 50c.	1 50	
Plus 15 per cent on \$3.75,	56	
2 bags cement @ 65c.	1 30	
100 bricks @ \$15 per M.	1 50	
4 cubic feet sand @ 6c.	24	
Extra work—Furnish filling to take place of poor material excavated:		
188 cubic yards filling furnished and placed @ \$1,	188 00	
<i>Carried forward</i>	\$3,900 71	\$2,626 12

<i>Brought forward</i>	\$3,900 71	\$2,626 12	
Extra work—Haul and lay recut granite blocks from Massachusetts avenue lot, furnished by city:			
1,515 square yards recut granite blocks hauled and laid @ \$2.25	3,863 25		
	<u>\$7,763 96</u>		
Less 13 corners furnished and delivered by City @ \$4	52 00		
	<u>\$7,711 96</u>		
Less amount paid in 1917.	4,427 53		
		<u>3,284 43</u>	
			<u>\$5,910 55</u>
<i>Parkland street</i> , from Winship street to Academy Hill road. Length, 466 linear feet. Area, 673 square yards. Edgestone reset, asphalt road- way paved and artificial stone sidewalks constructed. (Work done in 1917.)			
Engineering	\$11 62		
Engineering expense	10		
Final payment to Coleman Brothers for work done in 1917, under contract	437 26		
			<u>\$448 98</u>
<i>Parkton road</i> , from Perkins street to Perkins street. (Work done in 1917.)			
Engineering	\$16 00		
Engineering expense	20		
			<u>\$16 20</u>
<i>Park Vale avenue</i> , from Brighton avenue to Glenville avenue. Length, 890 linear feet. Area, 2,570 square yards. Edgestone reset, asphalt laid and artificial stone sidewalks constructed.			
Engineering	\$198 04		
Engineering expense	2 86		
Inspection	166 55		
Advertising	6 00		
Labor, making templates	16 00		
Edgestone, 460 feet 2½ inches	557 40		
	<u>\$946 85</u>		
Credit: Blocks, old granite	5 00		
			<u>\$941 85</u>
Amount paid to the Bermudez Company, under contract:			
Removing trees, bushes, etc.	\$100 00		
830 cubic yards earth excava- tion @ \$1.45	1,203 50		
	<u>\$1,303 50</u>		
Carried forward		<u>\$941 85</u>	

<i>Brought forward</i>	\$1,303 50	\$941 85
27 cubic yards rock excavation @ \$8	216 00	
562 linear feet straight edgestone and corners hauled and set @ 49c.,	275 38	
338 linear feet existing edgestone reset @ 28c.	94 64	
3 square yards granite block paving relaid, including concrete base and grout joints, @ \$2.25	6 75	
2,548 square yards concrete base, bituminous concrete binder and asphalt wearing surface, furnished and laid, @ \$2.80	7,134 40	
4,490 square feet artificial stone sidewalks furnished and laid @ 33c.	1,481 70	
350 square feet artificial stone driveways furnished and laid @ 35c.	122 50	
12 covers reset @ \$3	36 00	
	<hr/>	10,670 87
		<hr/> <u>\$11,612 72</u>

Patten street, from Hyde Park avenue to Bourne street. (Work done in 1917.)

Engineering	\$12 93
Final payment to Martino DeMatteo for work done in 1917, under contract	1,093 81
	<hr/> <u>\$1,064 74</u>

Peabody street, from Brookline avenue to Binney street. One hundred fifty feet edgestone set; 226 square yards gutters paved; 18 square yards crosswalks laid and 333 square yards roadway excavated. (Unfinished work from 1917 and still uncompleted.)

Engineering	\$14 63
Engineering expense	56
Labor, handling stock	5 10
Gravel	2 34
Blocks, 8,435 old granite	168 70
Cement	1 30
Edgestone, 340 feet straight	405 53
Teaming	200 25
Labor, edgestone excavating	262 83
Labor, edgestone setting	83 44
Labor, roadway excavating	133 01
Labor, gutter excavating	194 26
Labor, gutter paving	151 88
Labor, crosswalk relaying	16 24
	<hr/> <u>\$1,640 07</u>

Perham street, from Vermont street to New York, New Haven & Hartford Railroad. Length, 2,616 linear feet. Area, 7,565 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalk constructed. (Work done in 1917.)

Engineering	\$2 11	
Engineering expense	15	
Final payment to Central Construction Com- pany, for work done in 1917, under contract,	828 07	
	<hr/>	
	\$830 33	
Less 42,150 second-hand granite blocks de- livered to contractor at \$18 per M. . . .	758 70	
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		<u>\$71 63</u>

Perthshire road, from Bigelow street to Matchett street. (Work not started.)

Engineering	<u>\$21 00</u>
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Pontiac street, from Tremont street to Hillside street. Length, 934 linear feet. Area, 2,698 square yards. Earth and rock excavated.

Engineering	\$447 99	
Engineering expense	9 09	
Inspection	498 29	
Amount paid to J. C. Coleman & Sons Com- pany, under contract:		
1,150 cubic yards earth excavation @ 90c. . .	\$1,035 00	
2,600 cubic yards rock excavation @ \$2.50 . .	6,500 00	
600 cubic yards filling furnished @ \$1 . . .	600 00	
Building retaining wall	6,500 00	
Extra work—Construct openings in retaining wall as directed for house connections:		
12 openings @ \$39	468 00	
	<hr/>	
	\$15,103 00	
Less 5 per cent retained	755 15	
	<hr/>	
	\$14,347 85	
Less amount paid in 1917	3,901 50	
	<hr/>	
		10,446 35
		<u><u>\$11,401 72</u></u>

Public Alley No. 819, from Westland avenue to Batavia street. (Work not started.)

Engineering	\$19 00	
Engineering expense	35	
	<hr/>	
		<u>\$19 35</u>

Public Alley No. 820, from Huntington avenue to St. Botolph street. (Work not started.)

Engineering	\$22 36	
Engineering expense	35	
	<hr/>	
		<u>\$22 71</u>

Radford lane, from Carruth street to Bushnell street. Length, 432 linear feet. Area, 1,248 square yards. Artificial stone sidewalks constructed. Edgestone reset and tar macadam pavement laid. (Unfinished work from 1917.)

Engineering	\$73 21	
Engineering expense	1 63	
Inspection	73 48	
Edgestone	51 80	
Lumber	1 67	
Crushed stone, 422.4 tons	940 97	
Sand	1 50	
Gravel	4 70	
Advertising	5 25	
Teaming	106 57	
Steam roller	70 00	
Labor, edgestone excavating	24 57	
Labor, edgestone setting	6 25	
Labor, roadway excavating	50 71	
Labor, macadam spreading	207 36	
Labor, making templates	3 50	
Amount paid to Frank Drinkwater, under contract:		
4,987 square feet artificial stone sidewalks furnished and laid @ 23c.	\$1,147 01	
176 square feet artificial stone driveways furnished and laid @ 25c.	44 00	
	<hr/>	
	\$1,191 01	
Less 15 per cent retained,	178 65	
	<hr/>	
	1,012 36	
		<hr/>
		<u>\$2,635 53</u>

Ralston street, from *Dorchester avenue* to *Old Colony avenue*. Length, 1,127 linear feet. Area, 3,256 square yards. Reset edgestone, macadam roadway paved, crushed stone sidewalks constructed and retaining walls constructed.

Engineering	\$101 26	
Inspection	158 06	
Engineering expense	2 47	
Crushed stone	10 34	
Road oil, 10,572 gallons	1,269 24	
Amount paid to William J. Rafferty, under contract:		
Removing trees, bushes, etc.	\$5 00	
558 cubic yards earth excavation @ \$1	558 00	
2,024 linear feet straight edgestone and corners hauled and set @ 17c.,	344 08	
106 linear feet circular edgestone set @ 17c.	18 02	
73 linear feet existing edgestone reset @ 17c.	12 41	
30 square yards granite block paving hauled and laid, gravel joints, @ 85c.	25 50	
103 square yards existing granite block paving relaid, gravel joints, @ 75c.	77 25	
	<hr/>	
Carried forward	\$1,040 26	\$1,541 37

<i>Brought forward</i>	\$1,040 26	\$1,541 37
3,498 square yards bituminous macadam surface furnished and placed @ 98c.	3,428 04	
62 square yards existing brick sidewalk relaid @ 50c.,	31 00	
1,549 square yards crushed stone sidewalks furnished and placed @ 65c.	1,006 85	
20 covers reset @ \$3	60 00	
Extra work — Construct concrete retaining wall on northerly side of Ralston street, near Dorchester avenue	115 00	
Extra work — Construct concrete retaining wall on southerly side of Ralston street, near Dorchester avenue	90 00	
Extra work — Furnish and place filling where directed:		
708 cubic yards filling furnished @ \$1.50	1,062 00	
	<u>\$6,833 15</u>	
Less amount paid in 1917,	<u>2,229 59</u>	
		<u>4,603 56</u>
		<u><u>\$6,144 93</u></u>
<i>Randall street, from Harrison avenue to Albany street. (Work done in 1916.)</i>		
Final payment on contract to Central Construction Company		<u><u>\$30 48</u></u>
<i>Redlands road, from Centre street to Abbott street. (Work not started.)</i>		
Engineering	\$138 65	
Engineering expense	1 68	
		<u><u>\$140 33</u></u>
<i>Richwood street, from Centre street to Montview street. (Unfinished work from 1917), Length, 1,267 linear feet. Area, 3,548 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed.</i>		
Engineering	\$51 02	
Engineering expense	80	
Inspection	99 72	
Edgestone, 522 feet 3 inches straight and 9 feet 4 inches circular	389 92	
Blocks	6 94	
Flagging	28 00	
Crushed stone	2 25	
Amount paid to Central Construction Company, under contract:		
Removing trees, bushes, stumps, etc.	<u>\$26 00</u>	
<i>Carried forward</i>	<u>\$26 00</u>	<u>\$576 65</u>

<i>Brought forward</i>	\$26 00	\$576 65
2,114 cubic yards earth excavation @ 74c.	1,564 36	
4 cubic yards rock excavation @ \$6	24 00	
2,349 linear feet straight edgestone and corners hauled and set @ 23c.	540 27	
79 linear feet circular edgestone set @ 15c.	11 85	
36 linear feet existing edgestone reset @ 15c.	5 40	
9 square yards granite block paving hauled and laid, including concrete base, grout joints, @ 1.60	14 40	
15 square yards existing granite block paving relaid, including concrete base, grout joints, @ \$1.50,	22 50	
11,382 square feet artificial stone sidewalks furnished and laid @ 14½c.	1,678 85	
612 square feet artificial stone driveways furnished and laid @ 14½c.	90 27	
19 covers reset @ \$3	57 00	
581 square yards loam spaces furnished, placed and seeded @ 60c.	348 60	
Extra work — Omit furnishing and laying of brick block gutters, etc.:		
680 square yards concrete base and second-hand granite block paving furnished and laid @ \$2	1,360 00	
Extra work — Omit sheet asphalt and substitute Topeka pavement:		
2,795 square yards concrete base and Topeka pavement furnished and laid @ \$2.05	5,729 75	
87 square yards concrete base and Topeka pavement furnished and laid (unfinished) @ 80c.	69 60	
Extra work — Shift edgestone on account of construction of driveways not shown on plan:		
4 hours, edgestone setter, @ 81½c.	3 25	
12 hours, helper, @ 40c.	4 80	
Plus 15 per cent on \$8.05,	1 21	
<i>Carried forward</i>	<u>\$11,552 11</u>	<u>\$576 65</u>

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<i>Brought forward</i>	\$11,552 11	\$576 63
Extra work — Construct underdrain of crushed stone under sidewalks (south side) near Centre street:		
6 hours, foreman, @ 62½c.,	3 75	
101 hours' labor @ 40c.	40 40	
Plus 15 per cent on \$44.15	6 62	
7 hours, double team, @ 87½c.	6 13	
32½ tons crushed stone @ \$2,	65 00	
Extra work — Remove four (4) trees on north-erly side, near Centre street:		
4½ days, foreman, @ \$5	20 63	
3 days, timekeeper, @ \$3	9 00	
81 days' labor @ \$3.20	259 20	
Plus 15 per cent on \$288.83	43 32	
1½ days, double team, @ \$7,	10 50	
9 hours, auto truck, @ \$3.50	31 50	
Extra work — Complete Topeka pavement at Centre street. This portion of the street could not be finished on account of the operations of the Sewer Department:		
17 hours, foreman, @ 75c.,	12 75	
144 hours' labor @ 45c.	64 80	
Plus 15 per cent on \$77.55	11 63	
10 hours, auto truck, @ \$3.50	35 00	
9 hours, steam roller, @ \$2,	18 00	
8 hours, double team, @ 87½c.	7 00	
2 tons crushed stone @ \$2,	4 00	
18 cubic feet sand @ 6c.	1 08	
6 bags cement @ 62½ c.	3 75	
18 boxes Topeka @ \$4	72 00	
Extra work — Remove existing edgestone and artificial stone sidewalks opposite Atwill road and construct opening:		
6 days, foreman, @ \$6	36 00	
2 days, edgestone setter, @ \$7	14 00	
½ day, mason, @ \$8	7 00	
½ day, finisher, @ \$5.60	2 80	
41½ days' labor @ \$3.60	148 50	
1 day's labor, @ \$4	4 00	
Plus 15 per cent on \$212.30	31 85	
<i>Carried forward</i>	\$12,522 32	\$576 63

<i>Brought forward</i>	\$12,522 32	\$576 65
5½ days, double team, @ \$8,	43 00	
¼ days, auto truck, @ \$24,	18 00	
800 bricks @ 2c.	16 00	
23 bags cement @ 75c.	17 25	
4 double loads gravel @ \$2.63	10 52	
1½ double loads sand @ \$2.63	4 38	
1½ tons crushed stone @ \$2.25	2 81	
Extra work — Furnish additional edgestone as directed:		
103½ linear feet straight edgestone furnished @ \$1.10	113 85	
	<u>\$12,748 13</u>	
Less amount paid in 1917,	<u>10,862 12</u>	
		<u>1,886 01</u>
		<u><u>\$2,462 66</u></u>
<i>Ripley road, from Vassar street to Harvard street. Length, 685 linear feet. Area, 1,946 square yards. Edgestone set, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)</i>		
Engineering	\$5 96	
Final payment to Central Construction Company, for work done in 1916 and 1917, under contract	119 17	
		<u><u>\$125 13</u></u>
<i>Rowell street, from Hancock street to Cushing street. Length, 587 linear feet. Area, 1,700 square yards. (Work done in 1917.)</i>		
Engineering	\$17 43	
Amount paid to Martino DeMatteo, under contract:		
405 cubic yards earth excavation @ 75c.	\$303 75	
8 cubic yards water-box excavation @ \$5	40 00	
1 cubic yard rock excavation	5 00	
268 linear feet circular edgestone set @ 12c.	32 16	
81 linear feet existing edgestone reset @ 13c.	10 53	
1,932 square yards bituminous macadam surface furnished and placed @ 80c.	1,545 60	
2,001 square feet artificial stone sidewalks furnished and placed @ 14c.	280 14	
37 linear feet artificial curbing furnished and placed @ \$1	37 00	
4 covers reset @ \$3	12 00	
	<u>\$2,266 18</u>	
<i>Carried forward</i>		<u><u>\$17 43</u></u>

<i>Brought forward</i>	\$2,266 18	\$17 43
Extra work — Haul edge-stone from Downer avenue and cut same to fit closure:		
2 hours, stonecutter, @ 62½c.	1 25	
1 hour's labor @ 40c.	40	
Plus 15 per cent on \$1.65,	25	
1 hour, double team, @ 75c.,	75	
Extra work — Rebuild the Bradley head catch-basin at Cushing avenue and rebuild manholes where directed:		
16 hours, mason, @ 75c.	12 00	
14 hours' labor @ 40c.	5 60	
16 hours, tender, @ 40c.	6 40	
Plus 15 per cent on \$24	3 60	
3 scow loads sand @ \$1.25	3 75	
12 bags cement @ 65c.	7 80	
600 bricks @ \$15 per M.	9 00	
Extra work — Replace material washed out by overflow from catch-basin:		
9 hours, foreman, @ 62½c.	5 63	
111 hours' labor @ 40c.	44 40	
Plus 15 per cent on \$50.03,	7 50	
28 hours, double team, @ 75c.	21 00	
2 bags cement @ 65c.	1 30	
16 cubic yards filling @ \$1	16 00	
	<hr/>	
	\$2,412 81	
Less amount paid in 1917,	1,816 02	
	<hr/>	
	\$596 79	
Less amount retained	35 71	
	<hr/>	
		561 08
		<hr/>
		<u>\$578 51</u>

Rugby road, from Randolph road to Oakland street. Length, 552 linear feet. Area, 1,640 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$1 00
Engineering expense	15
Amount paid to Central Construction Company, under contract:	
Removing trees, bushes, stump, etc.	\$12 00
880 cubic yards earth excavation @ 74c.	651 20
8 cubic yards water-box excavation @ \$2	16 00
62 cubic yards rock excavation @ \$6	372 00
991 linear feet straight edgestone and corners, hauled and set @ 23c.	227 93
	<hr/>
<i>Carried forward</i>	\$1,279 13
	<hr/>
	\$1 15

<i>Brought forward</i>	\$1,279 13	\$1 15
67 linear feet circular edge-stone set @ 15c.	10 05	
9 square yards granite block paving hauled and laid, including concrete base, grout joints, @ \$1.60	14 40	
1,333 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.05	2,732 65	
6,321 square feet artificial stone sidewalks furnished and laid @ 14½c.	932 35	
451 square feet artificial stone driveways furnished and laid @ 14½c.	66 52	
7 covers reset @ \$3	21 00	
Extra work — Omit furnishing and laying of brick block gutters, etc.:		
298 square yards concrete base, and second-hand granite blocks, gutters furnished and laid, @ \$2	596 00	
Extra work — Split long edgestone to set around corners:		
12 hours, stonecutter, @ 62½c.	7 50	
Plus 15 per cent on \$7.50,	1 13	
Extra work — Remove stump not shown on schedule:		
2 hours' labor @ 33½c.	67	
Plus 15 per cent on 67c.	10	
	<u>\$5,661 50</u>	
Less 9,500 second-hand granite blocks delivered to contractor @ \$18 per M.	171 00	
	<u>\$5,490 50</u>	
Less amount paid in 1917,	5,238 38	
	<u>252 12</u>	
		<u>\$253 27</u>
<i>St. Albans road, from Francis street to Huntington avenue. (Work done in 1917.)</i>		
Engineering	\$9 00	
Engineering expense	20	
		<u>\$9 20</u>
<i>St. Rose street, from South street to 416 feet easterly. (Work done in 1917.)</i>		
Engineering	\$4 45	
Payment to M. DeMatteo for work done under contract in 1917	407 73	
		<u>\$412 18</u>

Santuit street, from Roseland street to Welles avenue. (Work done in 1917.)

Engineering	\$5 00	
Engineering expense	20	
Road oil	15 00	
		<u>\$20 20</u>

Saville street, from Park street to Stratford street. Length, 314 linear feet. Area, 915 square yards. Edgestone set, granite block gutters laid, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1917.)

Final payment to Central Construction Company for work done in 1917, under contract	<u>\$322 99</u>
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Seaver street, from Walnut avenue to Blue Hill avenue. (Work done in 1917.)

Engineering	\$59 60	
Engineering expense	40	
		<u>\$60 00</u>

South street, from Chestnut Hill avenue to Commonwealth avenue. Length, 616 linear feet. Area, 1,855 square yards. Edgestone set, granite block gutters laid, asphalt roadway laid and artificial stone sidewalks and driveways constructed. (Unfinished work from 1917.)

Engineering	\$78 09
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Amount paid to Coleman Brothers Company under contract:

Removing trees, bushes, etc.	\$55 00	
1,009 cubic yards earth excavation @ 90c.	908 10	
39 cubic yards rock excavation @ \$5	195 00	
1,123 linear feet straight edgestone and corners hauled and set @ 25c.	280 75	
110 linear feet circular edgestone set, @ 25c.	27 50	
101 linear feet existing edgestone reset @ 20c.	20 20	
206 cubic yards concrete base furnished and laid @ \$6	1,236 00	
351 square yards granite block paving hauled and laid, grout joints, @ \$1.60	561 60	
1,504 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.59	2,391 36	
7,786 square feet artificial stone sidewalks furnished and laid @ 16c.	1,245 76	
Carried forward	\$6,921 27	\$78 09

<i>Brought forward</i>	\$6,921 27	\$78 09
411 square feet artificial stone driveways furnished and laid @ 20c.	82 20	
6 covers reset @ \$3	18 00	
Extra work — Construct driveway not shown on plan:		
5 hours, edgestone setter, @ 75c.	3 75	
2 hours, paver, @ 75c	1 50	
5 hours, cement finisher, @ 65c.	3 25	
Plus 15 per cent on \$8.50	1 28	
17 bags cement @ 65c.	11 05	
1½ cubic yards gravel @ \$1.50	2 25	
1½ cubic yards sand @ \$1.50, Extra work — grade ap- proaches as directed:	2 25	
54 hours' labor @ 40c.	21 60	
Plus 15 per cent on \$21.60,	3 24	
5 hours, single team @ 50c.	2 50	
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	\$7,074 14	
Less amount paid in 1917	5,565 81	
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		1,508 33
		<hr/>
		\$1,586 42

Southwick Street, from Neponset avenue to Freeport street. Length 359 linear feet. Area, 1,045 square yards. Asphalt pavement laid, reset edgestone and artificial stone sidewalks constructed.

Engineering	\$25 21
Engineering expense	1 37
Inspection	23 01
Labor, chemist	9 00
Filling	346 75
Amount paid to Central Construction Com- pany under contract:	
Removing trees, etc.	\$60 00
223 cubic yards earth excava- tion @ 55c.	122 65
1,058 cubic yards filling fur- nished @ 50c.	529 00
540 linear feet straight edge- stone hauled and set @ 18c.	97 20
128 linear feet circular edge- stone set @ 11c.	14 08
52 linear feet existing edge- stone reset @ 10c.	5 20
24 square yards existing gran- ite block paving relaid, grout joints, including concrete base, @ \$1.25,	30 00
11 square yards existing flag- ging crosswalks relaid, grout joints, including concrete base, @ \$1.20,	13 20
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<i>Carried forward</i>	\$871 33
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	\$405 34

<i>Brought forward</i>	\$871 33	\$405 34
1,043 square yards concrete base, bituminous concrete binder and asphalt wearing surface, furnished and laid @ \$1.60,	1,668 80	
3,409 square feet artificial stone sidewalks furnished and laid @ 12½c.	426 13	
115 square feet artificial stone driveways furnished and laid @ 14c.	16 10	
4 covers reset @ \$3	12 00	
Extra work — Reset the edgestone and replace the concrete base where filling was removed:		
4 hours, foreman @ 75c.	3 00	
4 hours, timekeeper, @ 30c.,	1 20	
8 hours, edgestone setter, @ 87½c.	7 00	
24 hours, keeper, @ 45c.	10 80	
60 hours, labor @ 40c.	24 00	
Plus 15 per cent on \$46	6 90	
9½ cubic yards sand and gravel, @ \$1.62	15 39	
10½ tons crushed stone @ \$2	21 00	
16 bags cement @ 65c.	10 40	
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	\$3,094 05	
Less amount paid in 1917	1,318 22	
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	\$1,775 83	
Less amount paid in 1916	425 00	
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	1,350 83	
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		\$1,756 17

Stanhope Street, from Berkeley street to Trinity place. (Work not started.)

Engineering	\$6 00
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Stratton Street, from Lucerne street across Lyford street. Length, 916 linear feet. Area, 2,646 square yards. Macadam pavement laid, edgestone reset and artificial stone sidewalks constructed.

Engineering	\$155 47
Engineering expense	5 43
Inspection	437 60
Blocks	257 00
Edgestone, 868 feet 2 inches straight, 15 feet 1½ inches circular and 11 special stone	654 74
Labor, handling stock	12 89
Road oil, 6,389 gallons tar	777 20
Amount paid to Martino DeMatteo, under contract:	
850 cubic yards earth excavation @ \$1	850 00
8 cubic yards water box excavation @ \$5	40 00
	<hr/>
<i>Carried forward</i>	\$890 00
	<hr/>
	\$2,300 33

<i>Brought forward</i>	\$890 00	\$2,300 33
24 cubic yards rock excavation @ \$3	72 00	
890 linear feet straight edge-stone and corners hauled and set @ 30c.	267 00	
20 linear feet circular edge-stone set @ 18c.	3 60	
20 linear feet existing edge-stone reset @ 18c.	3 60	
350 square yards granite block paving hauled and laid @ 1c.	3 50	
2,300 square yards bituminous macadam surface furnished and laid @ 99c.	2,277 00	
600 square yards crushed stone sidewalks furnished and laid @ 75c.	450 00	
5,600 square feet artificial stone sidewalks furnished and laid @ 19c.	1,064 00	
10 covers reset @ \$3	30 00	
	<u>\$5,060 70</u>	
Less 15 per cent retained,	759 11	
	<u>4,301 59</u>	<u>\$6,601 92</u>
<i>Tebroc street, from Bowdoin street to Levant street. (Work not started.)</i>		
Engineering	\$50 00	
Engineering expense	30	
	<u></u>	<u>\$50 30</u>
<i>Theodore street, from Morton street 618 feet easterly. (Work done in 1917.)</i>		
Engineering	\$14 35	
Engineering expense	30	
Final payment to Central Construction Company for work done in 1917, under contract,	80 91	
	<u></u>	<u>\$95 56</u>
<i>Ticknor street, from Columbia road to Marine road. (Work not started.)</i>		
Engineering		<u>\$7 00</u>
<i>Tovar street, from Bowdoin street to Cameron street. (Work not started.)</i>		
Engineering	\$12 53	
Engineering expense	20	
	<u></u>	<u>\$12 73</u>
<i>Tuckerman street, from Dorchester street to Middle street. Length, 376 linear feet. Area, 783 square yards. Edgestone set, gutters repaved, roadway paved with asphalt, existing brick sidewalks relaid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)</i>		
Engineering	\$5 00	
Engineering expense	20	
Final payment to Central Construction Company, for work done in 1916 and 1917, under contract	30 48	
	<u></u>	<u>\$35 68</u>

Turner street, from Washington street to Faneuil street. Length, 1,255 linear feet. Area, 3,655 square yards. Edgestone set, granite block gutters, asphalt roadway and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$36 31	
Engineering expense	20	
Final payment to Coleman Brothers for work done under contract in 1917	2,070 33	
	<hr/>	<u>\$2,106 84</u>

Upland avenue, from Park street to Melville avenue. Length, 748 linear feet. Area, 2,509 square yards. Edgestone set, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$2 71	
Final payment to Central Construction Company, for work done in 1916 and 1917	54 20	
	<hr/>	<u>\$56 91</u>

Vista street, from Augustus avenue to Malvern road. (Work done in 1916 and 1917.)

Engineering	\$4 46	
Payment to Martino DeMatteo, for work done under contract in 1916 and 1917	477 34	
	<hr/>	<u>\$481 80</u>

Wachusett street, from Walk Hill street to Eldridge road. (Work not started.)

Engineering	\$62 00	
Engineering expense	1 00	
	<hr/>	<u>\$63 00</u>

Waldo terrace, from Washington street to Henshaw street. Length, 292 linear feet. Area, 510 square yards. Edgestone set, gutters paved, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$11 10	
Engineering expense	30	
Amount paid to Coleman Brothers under contract:		
222 cubic yards earth excavation @ 90c.	\$199 80	
251 linear feet straight edgestone and corners hauled and set @ 25c.	62 75	
23 linear feet circular edgestone set @ 25c.	5 75	
363 linear feet existing edgestone reset @ 20c.	72 60	
57 cubic yards concrete base furnished and laid @ \$6,	342 00	
104 square yards granite block paving, hauled and laid, grout joints, @ \$1.60	166 40	
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Carried forward	\$849 30	\$11 40

<i>Brought forward</i>	\$849 30	\$11 40
406 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.59	645 54	
1,499 square feet artificial stone sidewalks furnished and laid @ 16c.	239 84	
179 square feet artificial stone driveways furnished and laid @ 20c.	35 80	
8 covers reset @ \$3	24 00	
Extra work — Fill abandoned cesspool and water box and cut tree roots in edgestone trench.		
11 hours' labor @ 35c.	3 85	
Plus 15 per cent on \$3.85,	58	
Extra work—Reconstruct entrance at Warren Building and Police Department stables:		
1 hour, stonecutter, @ 45c.,	45	
2 hours, edgestone setter, @ 75c.	1 50	
3 hours' labor @ 40c.	1 20	
Plus 15 per cent on \$3.15,	47	
	<u>\$1,802 53</u>	
Less amount paid in 1917,	<u>1,455 35</u>	
		<u>347 18</u>
		<u><u>\$358 58</u></u>

Washington street, from Armandine street to Mora street. (Work done in 1914.)

Final payment to James Doherty for work done in 1914, under contract \$186 68

Wensley street, from Bucknam street to Bickford street. Length, 416 linear feet. Area, 1,202 square yards. Edgestone set, bituminous macadam roadway built and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$10 07	
Engineering expense	20	
Amount paid to Martino DeMatteo, under contract:		
233 cubic yards earth excavation at 75c.	\$174 75	
19 cubic yards water box excavation @ \$5	95 00	
529 cubic yards filling furnished @ \$1	529 00	
792 linear feet straight edgestone and corners hauled and set @ 25c.	198 00	
8 linear feet circular edgestone set @ 12c.	96	
	<u>\$997 71</u>	
<i>Carried forward</i>		<u>\$10 27</u>

<i>Brought forward</i>	\$997 71	\$10 27
190 linear feet existing edge-stone reset @ 13c.	224 70	
427 linear feet crushed stone and concrete foundation furnished and placed @ 14c.	59 78	
31 square yards existing granite block paving relaid @ 45c.	13 95	
12 square yards existing flagging crosswalks relaid @ 45c.	5 40	
1,231 square yards bituminous macadam surface furnished and laid @ 80c.,	984 80	
6,215 square feet artificial stone sidewalks furnished and laid @ 14c.	870 10	
1 cover reset @ \$3	3 00	
Extra work — Make an excavation to locate existing surface drain:		
8 hours' labor @ 40c.	3 20	
Plus 15 per cent on \$3.20,	48	
	<hr/>	
	\$2,963 12	
Less amount paid in 1917,	1,952 40	
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	\$1,010 72	
Less amount retained	35 71	
	<hr/>	
	975 01	
	<hr/>	
		<u>\$985 28</u>

Westover street, from Weld street to Dunbar street. (Work not started.)

Engineering	\$5 00
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Westwood street, from Richfield street to Wales place. Length, 607 linear feet. Area, 1,760 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1916 and 1917.)

Engineering	\$6 00
Final payment to Central Construction Company for work done in 1916 and 1917, under contract	187 68
	<hr/>
	<u>\$193 68</u>

Wilmington avenue, from Milton avenue to Nevada street. Length, 616 linear feet. Area, 2,327 square yards. Macadam roadway laid, edgestone reset and artificial stone sidewalks constructed.

Engineering	\$104 02
Engineering expense	2 91
Inspection	294 79
Labor, handling stock	36 85
Edgestone, 1,260 feet straight, 4 small corners and 4 special cut	1,574 13
	<hr/>
<i>Carried forward</i>	\$2,012 70

<i>Brought forward</i>		\$2,012 70	
Amount paid to Martino DeMatteo, under contract:			
600 cubic yards earth excavation @ \$1	\$600 00		
1,180 linear feet straight edge-stone and corners hauled and set @ 30c.,	354 00		
20 linear feet circular edge-stone set @ 18c.	3 60		
600 linear feet crushed stone and concrete foundation furnished and placed @ 18c.	108 00		
2,550 square yards bituminous macadam foundation furnished and placed (unfinished) @ 98c.	2,205 00		
8,900 square feet artificial stone sidewalks furnished and laid @ 19c.	1,691 00		
150 square feet artificial stone driveways furnished and laid @ 25c.	37 50		
	<u>\$4,999 10</u>		
Less 15 per cent retained,	749 86		
		<u>4,249 24</u>	<u>\$6,261 94</u>

Wordsworth street, Horace street to Coleridge street. Length, 662 linear feet. Area, 2,618 square yards. Edgestone set, granite block gutters laid, asphalt roadway laid and artificial stone sidewalks constructed. (Work done in 1917.)

Engineering	\$7 63	
Engineering expense	30	
Final payment to Central Construction Company, for work done under contract in 1917,	157 60	
		<u>\$165 53</u>

Wyoming street, from Wabeno street to Humboldt avenue. (Work done in 1917.)

Engineering	\$7 36	
Payment to Martino DeMatteo, for work done in 1917, under contract	184 61	
		<u>\$194 97</u>

RECAPITULATION OF STREET WORK.

MAINTENANCE.

<i>A street</i> , from West Fourth street to West Fifth street	\$1,013 12
<i>Adams street</i> , from Ashmont street to Minot street	3,373 68
<i>Adams street</i> , from Minot street to Codman street,	2,491 36
<i>Adams street</i> , from Park street to Lincoln street,	2,161 79
<i>Adams street</i> , from Dorchester avenue to Eaton square	3,810 85
<i>Amory street</i> , from Green street to Boylston street,	101 96
<i>Astor street</i> , from Massachusetts avenue to Hemenway street	430 84
<i>Atherton street</i> , from Amory street to Lamartine street	129 00
<i>Blue Hill avenue</i> , from Georgia street to Seaver street	5,633 52
<i>Brookline avenue</i> , from Audubon road to the Riverway	1,192 10
<i>Camden street</i> , from Tremont street to Shawmut avenue	1,354 95
<i>Cliff street</i> , from Washington street to Warren street	2,483 61
<i>Codman street</i> , from Adams street to Carruth street	854 42
<i>Columbus avenue</i> , from Washington street to Walnut avenue	2,432 55
<i>Columbus avenue</i> , from Centre street to Washington street	2,271 92
<i>Columbia road</i> , east side, from Cushing avenue 276 feet south	1,847 69
<i>Condor street</i> , from Glendon street to Brooks street,	3,191 74
<i>Corey street</i> , from Newton line to cemetery gate,	1,197 24
<i>Corinth street</i> , from Washington street to Belgrade avenue	1,912 97
<i>Corning street</i> , from Shawmut avenue to railroad,	383 46
<i>Crawford street</i> , from Humboldt avenue to Harold street	479 63
<i>Curve street</i> , from Albany street to Broadway	681 17
<i>East Brookline street</i> , from Shawmut avenue to Harrison avenue	1,273 86
<i>Carried forward</i>	\$40,703 43

<i>Brought forward</i>	\$40,703 43
<i>East Concord street</i> , from Washington street to Harrison avenue	1,216 27
<i>East Cottage street</i> , from Dudley street to railroad bridge	1,712 01
<i>East Dedham street</i> , from Washington street to Harrison avenue	1,378 07
<i>Edson street</i> , from Norfolk street to Milton avenue	210 15
<i>Ellery street</i> , near Southampton street	747 80
<i>Elm street</i> , from Washington street to Hanover street	1,109 34
<i>Falmouth street</i> , from Norway street to Belvidere street	713 92
<i>Fargo street</i> , from C street to D street	2,886 35
<i>Fern street</i> , from Franklin street to Holton street	139 05
<i>Franklin street</i> , from North Harvard street to Lincoln street	2,448 15
<i>Freeport street</i> , from Union street to bridge	2,169 52
<i>Gardner street</i> , from Baker street 2,300 feet easterly	1,278 45
<i>Geneva avenue</i> , from Bowdoin street to Dorchester avenue	433 89
<i>Geneva avenue</i> , from Park street to Bowdoin street	1,808 80
<i>Geneva avenue</i> , from Wilder street to Columbia road	1,189 48
<i>Georgia street</i> , from Blue Hill avenue to Montana street	1,259 73
<i>Gerard street</i> , from Kemble street to Norfolk avenue	3,725 19
<i>Glenwood avenue</i> , from River street to Metropolitan Parkway	1,710 21
<i>Green street</i> , from Main street to High street	380 32
<i>Hancock street</i> , from Columbia road to Bowdoin street	1,846 17
<i>Hanover street</i> , from Cross street to Blackstone street	726 61
<i>Harvard street</i> from Washington street to Algonquin street	3,325 48
<i>Havre street</i> , from Meridian street to Bennington street	4,547 81
<i>Jersey street</i> , from Audubon road to Brookline avenue	1,018 49
<i>Kimball street</i> , from Dorchester avenue to Freeport street	52 50
<i>Leonard street</i> , from Adams street to Clayton street	380 70
<i>Leyden street</i> , from Breed street to Boardman street	899 87
<i>Carried forward</i>	<hr/> \$80,017 76

PUBLIC WORKS DEPARTMENT.

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<i>Brought forward</i>	\$80,017 76
<i>London street</i> , from Sumner street to Meridian street	2,965 47
<i>London street</i> , from Meridian street to Bennington street	2,230 69
<i>Lyndeboro' street</i> , from Essex street to Middlesex street	197 64
<i>Milford street</i> , from Tremont street to Shawmut avenue	1,501 58
<i>Nassau street</i> , from Harrison avenue to Ash street,	668 76
<i>Neponset avenue</i> , from King square to Ashmont street	9,194 04
<i>Northern avenue</i> , in the vicinity of the Fish Pier	2,321 48
<i>Old Colony avenue</i> , from Columbia road bridge 700 feet northerly	2,043 96
<i>Old Colony avenue</i> , from Dorchester avenue 210 feet easterly	3,283 61
<i>Orleans street</i> , from Maverick street to Gove street	715 71
<i>Paris street</i> , from Maverick street to Bennington street	6,452 88
<i>Pembroke street</i> , from Tremont street to Shawmut avenue	1,375 85
<i>Peterborough street</i> , from Jersey street to Audubon road	697 93
<i>Pilgrim road</i> , from Brookline avenue to Longwood avenue	551 34
<i>Poplar street</i> , from Washington street 255 feet south of Hillburn street	7,417 66
<i>Queensberry street</i> , from Jersey street to Audubon road	778 39
<i>Quincy street</i> , from Blue Hill avenue to railroad bridge	155 05
<i>River street</i> , from Mattapan square to Everett square	5,825 34
<i>River street</i> , from Mattapan square 500 feet easterly	7,234 78
<i>Roberts street</i> , from Belgrade avenue to South street,	2,686 22
<i>Rollins street</i> , from Harrison avenue to Washington street	403 20
<i>Southampton street</i> , from railroad bridge to Andrew square	892 39
<i>Stillman street</i> , from Endicott street to Washington Street North	1,234 62
<i>Stoughton street</i> , from Harrison avenue to Albany street	1,554 45
<i>Strathmore road</i> , from Lothian road to Chestnut Hill avenue	1,443 08
<i>Carried forward</i>	<hr/> \$143,843 88

<i>Brought forward</i>	\$143,843 88
<i>Tremont street</i> , from Edgeworth street to Chelsea street	373 67
<i>Union Park street</i> , from Harrison avenue to Albany street	2,306 15
<i>Walnut avenue</i> , from Rockland avenue to Dale street	1,831 18
<i>Walnut park</i> , from Walnut avenue to Washington street	624 09
<i>Waltham street</i> , from Harrison avenue to Tremont street	2,730 84
<i>Warren street</i> , from Commonwealth avenue to Cambridge street	9,813 97
<i>Washington street</i> , from Oak square to Newton line	503 90
<i>West Broadway</i> , from Dorchester avenue 125 feet easterly	765 79
<i>West Fifth street</i> , from Dorchester avenue to Fifth Street place	3,623 15
<i>West Fourth street</i> , from Dorchester avenue to A street	1,526 26
<i>West Newton street</i> , from Shawmut avenue to Tremont street	1,228 91
<i>West Seventh street</i> , from Dorchester avenue 150 feet easterly	1,373 65
Total	<u>\$170,545 44</u>

CHARGED TO SPECIAL APPROPRIATIONS.

<i>Belgrade avenue extension and Beech street</i> , widening	\$1,717 11
<i>Charles street</i> (now Caledonian avenue), from Spring street to Hamilton street	47 00
<i>Chelsea street</i> , Charlestown, widening	* 8,373 89
<i>Hyde Park avenue</i> , widening, Hyde Park	4,121 99
<i>Norfolk street</i> , Dorchester, widening, from Corbet street to Blue Hill avenue (see, also, Highways, Making of)	79,037 46
Total	<u>\$93,297 45</u>

CHARGED TO APPROPRIATION FOR GRANOLITHIC SIDEWALKS.

<i>Adams street</i> , west side, from Codman street to Richmond street	\$1,062 32
<i>Adams street</i> , from King square to Ashmont street,	2,610 23
<i>Ainsley street</i> , from Rosemont street southerly	11 03
<i>Carried forward</i>	<u>\$3,683 58</u>

* Credit of \$9.19 on Highways, Making of.

<i>Brought forward</i>	\$3,683 58
<i>Amherst street</i> , from Belgrade avenue to Penfield street	4 48
<i>Amory street</i> , from Boylston street to Green street	1,080 21
<i>Auckland street</i> , from Belfort street 51 feet south- erly	10 65
<i>Beech street</i> , from West Roxbury parkway to Robeson street	110 64
<i>Belfort street</i> , from Dorchester avenue to Saga- more street	379 64
<i>Belvidere street</i> , from Massachusetts avenue to Dalton street	10
<i>Brooks street</i> , from Faneuil street to Hobart street	6 00
<i>Brookside avenue</i> , from Boylston street to Green street	5,838 29
<i>Brown avenue</i> , from Poplar street to Blakemore street	2,340 64
<i>Cleveland place</i> , from Margaret street to Snow Hill street	1,395 49
<i>Dix street</i> , from Adams street 120 feet westerly	34 14
<i>Dorchester avenue</i> , from Park street to Peabody square	1,096 11
<i>Dorchester avenue</i> , from Freeport street to Park street	1,546 11
<i>Edison green</i> at No. 6	10 06
<i>Evergreen street</i> , west side, South Huntington avenue to Day street	1,821 51
<i>Fairbanks street</i> , from Faneuil street to Washing- ton street	6 00
<i>Hanover street</i> , from Court street to Commercial street	2,800 48
<i>Holton street</i> , from Everett street to Franklin street	6 00
<i>Holbrook street</i> , from Centre street to Dane street	14 93
<i>Hyde Park avenue</i> , west side, from Tower street to Walk Hill street	486 95
<i>King street</i> , from Neponset avenue to Adams street	676 97
<i>Lamartine street</i> , from Boylston street to Green street	960 39
<i>Mapleton street</i> , from Murdock street to Market street	2 00
<i>Market street</i> , east side, from Sparhawk street to Mapleton street	2 00
<i>Neponset avenue</i> , from King street to Boutwell street	653 96
<i>Norfolk avenue</i> , west side, from Shirley street to Burrell street	5 10
<i>Carried forward</i>	<hr/> \$24,972 43

<i>Brought forward</i>	\$24,972 43
<i>Park street</i> , north side, from Clayton street to Adams street	215 47
<i>Paul Gore street</i> , north side, from No. 12 to Chestnut avenue	591 79
<i>Richmond street</i> , north side, from Adams street to Dorchester avenue	815 50
<i>Ridge street</i> , from Brown avenue to Sycamore street	1,275 15
<i>Rockwell street</i> , from Washington street to Milton avenue, etc.	5 28
<i>Rosemont street</i> , from Adams street to Gustine street	186 46
<i>Scotia street</i> , from St. Cecilia street to Dalton street	3 10
<i>Seymour street</i> , from Brown avenue to Canterbury street	584 20
<i>Sherwood street</i> , from Ashland street to Florence street	1,512 85
<i>Shirley street</i> , south side, from Clifton street to Norfolk avenue	5 10
<i>Sycamore street</i> , from Florence street to Ashland street	4,840 19
<i>Tower street</i> , from Hyde Park avenue to Forest Hills cemetery	391 76
<i>Walk Hill street</i> , west side, from Hyde Park avenue to 400 feet southerly	87 32
<i>West Selden street</i> , from Crossman street 2,100 feet easterly	1,014 22
<i>Westville street</i> , north side, from Orchardale street to 205 feet east of Bowdoin street	149 49
<i>Westville street</i> , south side, from Bowdoin street to Iowa street	26 90
<i>Wrentham street</i>	25 92
Total	<u>\$36,703 13</u>

CHARGED TO APPROPRIATION FOR RECONSTRUCTING AND
REPAIRING STREETS BY CONTRACT.

<i>Atlantic avenue</i> , from Kneeland street to Summer street	\$66,198 28
<i>Atlantic avenue</i> , from Summer street to Broad street	24,256 29
<i>Atlantic avenue</i> , from Broad street to South Market street.	74,192 45
<i>Atlantic avenue</i> , from South Market street to Commercial street	41,291 80
<i>Carried forward</i>	<u>\$205,938 82</u>

<i>Brought forward</i>	\$205,938 82
<i>Broadway</i> , from Washington street to bridge over Boston & Albany Railroad	16,087 98
<i>Causeway street</i> , from Prince street to Washington Street North	508 50
<i>Cenire street</i> , from South street to Spring street	*185 61
<i>Commercial street</i> , from Causeway street to Han- over street	19,290 82
<i>Congress street</i> , from Atlantic avenue to Fort Point channel	32,324 35
<i>Dorchester avenue</i> , from Congress street to Summer street	16,118 87
<i>Dorchester avenue</i> , from West Second street to Old Colony avenue, in and near Andrew square, Boston street and Southampton street	38,736 65
<i>Dorchester avenue</i> , from Rawson street to Savin Hill avenue	1,602 16
<i>East Broadway</i> , from Dorchester street to L street, <i>Leverett street</i> , from Green street to Charles street, <i>Rutherford avenue</i> , from Chapman street to Cam- bridge street	922 47 440 89 1,094 58
<i>Saratoga street</i> , from Chelsea street to Bennington street	75,922 85
<i>State street</i> , from Merchants row to India street and from Commercial street to Atlantic avenue, <i>Summer street</i> , from Fort Point channel to draw- bridge	37,057 05 173 44
<i>Tremont street</i> , from Common street to Castle street	418 75
<i>Tremont street</i> , from Castle street to Dover street, <i>Washington street</i> , from Market street to Faneuil street	675 84 1,107 58
<i>Washington street</i> , from Forest Hills to Archdale road	52,164 97
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	\$500,772 18
Less amount charged to Street Improvements,	2,942 04
	<hr/>
Total	<u>\$497,830 14</u>

CHARGED TO APPROPRIATION FOR STREET IMPROVEMENTS.

<i>Albany street</i> , from Dover street to Massachusetts avenue	\$8,197 47
<i>Albany street</i> , from Kneeland street to Boston & Albany Railroad	46,192 59
	<hr/>
<i>Carried forward</i>	\$54,390 06

* See Highways, Making of.

<i>Brought forward</i>	\$54,390 06
<i>Amory street</i> , north side, from Bragdon street to Atherton street	6,039 43
<i>Appleton street</i> , from Berkeley street to Columbus avenue	509 93
<i>Arlington street</i> , from Boylston street to St. James avenue	5,023 52
Artificial stone sidewalks	4,277 35
Asphalt pavements repaired	69,108 11
<i>Battery-march street</i> , from Franklin street to Broad street	41 46
<i>Beach street</i> , from Harrison avenue to Atlantic avenue	2,084 61
<i>Beacon street</i> , from Tremont street to Park street	167 71
<i>Beacon street</i> , from Park street to Charles street	116 00
<i>Beacon street</i> , from Raleigh street to Boston & Albany Railroad	13,144 53
<i>Blossom street</i> , from Fruit street to Allen street	239 63
<i>Bowdoin street</i> , from Topliff street to 78 feet west of Mt. Ida road	3,147 62
<i>Bowdoin street</i> , from Winter street to Quincy street	10,990 61
<i>Boylston street</i> , from Tremont street to Washington street	304 82
<i>Brighton avenue</i> , from Commonwealth avenue to Cambridge street	6,900 40
<i>Canal street</i> , from Haymarket square to Causeway street	1,952 17
<i>Chandler street</i> , from Berkeley street to Clarendon street	399 35
<i>Charles street</i> , from Beacon street to Boylston street	6,944 05
<i>Clinton street</i> , from Merchants row across Commercial street	18,112 67
<i>Columbia road</i> , from Edward Everett square to Dudley street	38 46
<i>Congress street</i> , from Milk street to Atlantic avenue	180 42
<i>Cross street</i> , from Commercial street to Haymarket square	20,778 60
<i>D street</i> , from Dorchester avenue to West Seventh street	549 12
<i>Dartmouth street</i> , from Tremont street to Stuart street	39,327 73
<i>Dearborn street</i> , from Albany street to Dudley street	284 10
<i>Devonshire street</i> , from Adams square to Water street	46 46
<i>Carried forward</i>	\$265,098 92

<i>Brought forward</i>	\$265,098 92
<i>Dorchester avenue</i> , from Freeport street to Park street	28,081 33
<i>Dorchester avenue</i> , from Savin Hill avenue to Freeport street	3,052 23
<i>Dorchester avenue</i> , from Peabody square to Washington street	35,225 73
<i>Endicott street</i> , from Hanover street to Lafayette avenue	8,448 81
<i>Fruit street</i> , from Blossom street to Charles street	310 45
<i>Federal street</i> , from Milk street to Atlantic avenue	153 13
<i>Harrison avenue</i> , from Kneeland street to Dover street	32,585 35
<i>Harvard street</i> , from Prescott street to south side of Harvard square	3,060 38
<i>Hawkins street</i> , from Sudbury street to Chardon street	3,603 64
<i>Haymarket square</i>	2,844 84
<i>India street</i> , from Atlantic avenue	19 00
<i>Lincoln street</i> , from Essex street to Beach street	51 96
<i>Market street</i> , from Washington street to Weston avenue	231 57
<i>Maverick square</i> , from Sumner street to Maverick street	1,472 39
<i>Mercantile street</i> , from South Market street to Richmond street	17,406 92
<i>Merchants row</i> , from State street to South Market street	32 00
<i>McKinley square</i> , at Custom House	58 24
<i>Neponset avenue</i> , from Ashmont street to Chickatawbut street	5,987 22
<i>North Anderson street</i> , from Parkman street to Fruit street	32 73
<i>North Grove street</i> , from Cambridge street to Fruit street	234 73
<i>North Russell street</i> , from Cambridge street to Eaton street	790 77
<i>Park street</i> , from Tremont street to Beacon street	8,801 49
<i>Parkman street</i> , from North Anderson street to North Grove street	76 95
<i>Portland street</i> , from Hanover street to Causeway street	180 91
<i>Richmond street</i> , from Hanover street to Atlantic avenue	51 79
<i>School street</i> , from Washington street to Tremont street	473 29
<i>Somerset street</i> , from Beacon street to Ashburton place	5,696 72
<i>Carried forward</i>	\$424,063 49

<i>Brought forward</i>	\$424,063 49
<i>South street</i> , from Jamaica street to Arborway	7,671 03
<i>Sudbury street</i> , from Court street to Merrimac street	22,047 72
<i>Talbot avenue</i> , from Dorchester avenue to Welles avenue	35 00
<i>Tremont street</i> , from Boylston street to Common street	2,259 45
<i>Tremont street</i> , from Hammond street to Station street	359 17
<i>Washington street</i> , from 78 feet south of Court avenue to Beach street	459 40
<i>Washington street</i> , from Haymarket square to Elm street	2,485 82
<i>Washington street</i> , from Brattle street across Elm street	873 27
<i>Washington street</i> , from Talbot avenue to Armandine street	18,054 33
<i>West Broadway</i> , from Dorchester avenue to E street	1,763 25
<i>West Canton street</i> , from Tremont street to Berkeley street	280 04

\$480,351 97

Repairing streets plus amount shown under reconstructing and by contract	2,942 04
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\$483,294 01

Less amount charged to appropriation for Paving Service	18,226 88
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\$465,067 13

CHARGED TO APPROPRIATION FOR HIGHWAYS, MAKING OF.

<i>Amory street</i> , north side, from Bragdon street 384 feet westerly	\$869 11
<i>Alger street</i> , from Dorchester avenue to railroad	3,096 18
<i>Atwell road</i> , from Richwood street to Park street	4 00
<i>Augustus avenue</i> , from Metropolitan avenue to Ethel street	505 45
<i>Atkins street</i> (credit on account of old materials, \$44.10).	
Asphalt mixer	1,290 00
<i>Baird street</i> , from Morton street to Blue Hill avenue	4 00
<i>Blake street</i> , from Hyde Park boundary across Randolph road	70 33
<i>Bowdoin street</i> , near Hendry street	387 79

Carried forward \$6,226 86

<i>Brought forward</i>	\$6,226 86
<i>Breck avenue</i> , from Washington street to Langley road	1,253 03
<i>Brunswick street</i> , from Blue Hill avenue to Nor- mandy street	30 17
<i>Burlington avenue</i> , from Brookline avenue 501 feet northwesterly	3 00
<i>Cameron street</i> , from Hancock street 130 feet southerly	43 20
<i>Carmel street</i> , from Tremont street to Delle avenue	3,384 42
<i>Caspian way</i> , from Savin Hill avenue 520 feet northerly	1,091 31
<i>Centerville park</i> , from Upland avenue to Bruns- wick street	90 96
<i>Cedric street</i> , from Magazine street to Langdon street	35 06
<i>Centre street</i> , from South street to Spring street,	185 61
<i>Chelsea street</i> , from Foss street to Adams street,	1 25
<i>Chelsea street</i> , from Chamber to Foss street (credit on account of old material, \$9.19).	
<i>Clarendon street</i> , from Stuart street to Boylston street	3 00
<i>Cliffmont street</i> , from Canterbury street 1,120 feet southwesterly	7,857 12
<i>Conley street</i> , from Old Colony parkway to Tenean street	1,138 21
<i>Cornell street</i> , from Orange street to Colberg avenue	2,267 03
<i>Cummings road</i> , from Commonwealth avenue 835 feet easterly	438 25
<i>Dana Avenue footway</i> , from Dana avenue to Easton avenue	2,750 00
<i>Deer street</i> , from Roach street to Melvinside terrace	334 81
<i>Downer avenue</i> , from DeWolf street to Sawyer avenue	1,014 83
<i>Dunbar avenue</i> , from Washington street westerly,	70 83
<i>East First street</i> , from West First street to H street	8 00
<i>Epping street</i> , from Washington street to Norfolk street	124 42
<i>Eric avenue</i> , from Savin Hill avenue 344 feet northerly	30 49
<i>Everton street</i> , from Geneva avenue to Olney street	202 45
<i>Fordham road</i> , from Commonwealth avenue to Brighton avenue	421 86
<i>Carried forward</i>	<hr/> \$29,006 17

<i>Brought forward</i>	\$29,006 17
<i>Fuller street</i> , from Commonwealth avenue to Brookline line	2,286 52
<i>Gaffney, street</i> , from Commonwealth avenue to Boston & Albany Railroad	31 83
<i>Glencoe street</i> , from North Beacon street to Garden street	274 77
<i>Goodale road</i> , from Blue Hill avenue 620 feet westerly	7,375 66
<i>Gove street</i> , from Cottage street to Venice street	2,483 19
<i>Granada avenue</i> , from Metropolitan avenue to Ethel street	468 61
<i>Greenview avenue</i> , from Centre street 219 feet southeasterly	8 00
<i>Grove street</i> , from Centre street to Washington street	31,226 20
<i>Halifax street</i> , from South Huntington avenue to Pond View street	56 07
<i>Harvard street</i> , from Fabyan street to Brookview street	48 42
<i>Harvard street</i> , from Morton street to Deering road	3,810 76
<i>Hill Top street</i> , from Granite avenue to Hallet street	3,251 24
<i>Holden street</i> , from Columbia road westerly	19 77
<i>Holton street</i> , from Everett street to Antwerp street	5 00
<i>Homestead street</i> , from Elm Hill avenue to Humboldt avenue	284 81
<i>Hubert street</i> , from Shawmut avenue to Westminster street	30 49
<i>Hunnewell avenue</i> , from Champney street to Atkins street	4,677 45
<i>Justin road</i> , from Bigelow street to Atkins street	3 00
<i>Kenton road</i> , from Washington street 800 feet easterly	162 45
<i>Langley road</i> , from Breck avenue 570 feet easterly	2,554 25
<i>Levant street</i> , from Geneva avenue to Topliff street	92 70
<i>Lithgow street</i> , from Talbot avenue to Washington street	94 54
<i>Lorne street</i> , from Harvard street 650 feet northerly	9 67
<i>Malverna road</i> , from Metropolitan avenue to Ethel street	6 00
<i>Matchett street</i> , from Washington street 843 feet northerly	179 92
<i>Minton street</i> , from Amory street to Brookside avenue	6,143 36
<i>Carried forward</i>	<hr/> \$94,590 85

PUBLIC WORKS DEPARTMENT.

313

<i>Brought forward</i>	\$94,590 85
<i>Moraine street</i> , from South Huntington avenue to Jamaica way	11,812 09
<i>Mt. Ida road</i> , from Robinson street to 254 feet south of Marie street	653 23
<i>Museum road</i> , from Huntington avenue to Fenway street	4,540 84
<i>Neptune road</i> , from Bennington street to Boston, Revere Beach & Lynn Railroad	10,655 20
<i>Nevada street</i> , from Fairmount street to Wilmington avenue	2,569 51
<i>Normandy street</i> , from Intervale street to Devon street	59 82
<i>North Beacon street</i> , from Cambridge street to Market street	54,042 43
<i>Norwood street</i> , extended to Conley street	26 60
<i>Norfolk street</i> (see special appropriation for Norfolk street)	13,097 26
<i>Orchardfield street</i> , from Dorchester avenue to Freeport street	65 46
<i>Overland street</i> , from Brookline avenue to Boston & Albany Railroad	5,910 55
<i>Parkland street</i> , from Winship street to Academy Hill road	448 98
<i>Parkton road</i> , from Perkins street to Perkins street	16 20
<i>Park Vale avenue</i> , from Brighton avenue to Glenville avenue	11,612 72
<i>Patten street</i> , from Hyde Park avenue to Bourne street	1,106 74
<i>Peabody street</i> , from Brookline avenue to Binney street	1,640 07
<i>Perham street</i> , from Vermont street to New York, New Haven & Hartford Railroad	71 63
<i>Perthshire road</i> , from Bigelow street to Matchett street	21 00
<i>Pontiac street</i> , from Tremont street to Hillside street	11,401 72
<i>Public Alley 819</i> , from Westland avenue to Batavia street	19 35
<i>Public Alley 820</i> , from Huntington avenue to St. Botolph street	22 71
<i>Radford lane</i> , from Carruth street to Bushnell street	2,635 53
<i>Ralston street</i> , from Dorchester avenue to Old Colony avenue	6,144 93
<i>Randall street</i> , from Harrison avenue to Albany street	30 48

Carried forward \$233,195 90

<i>Brought forward</i>	\$233,195 90
<i>Redlands road, from Centre street to Abbott street</i>	140 33
<i>Richwood street, from Centre street to Montview street</i>	2,462 66
<i>Ripley road, from Harvard street to Vassar street, Rowell street, from Hancock street to Cushing avenue</i>	125 13
<i>Rugby road, from Randolph road to Oakland street</i>	578 51
<i>St. Albans road, from Francis street to Huntington avenue</i>	253 27
<i>St. Rose street, from South street 416 feet westerly, Santuit street, from Roseland street to Welles avenue</i>	9 20
<i>Saville street, from Park street to Stratford street</i>	412 18
<i>Seaver street, from Walnut avenue to Blue Hill avenue</i>	20 20
<i>South Street, from Chestnut Hill avenue to Commonwealth avenue</i>	322 99
<i>Southwick street, from Neponset avenue to Freeport street</i>	60 00
<i>Stanhope street, from Berkeley street to Trinity place</i>	1,586 42
<i>Stratton street, from Lucerne street across Lyford street</i>	1,756 17
<i>Tebroc street, from Bowdoin street to Levant street, Theodore street, from Morton street 618 feet easterly</i>	6 00
<i>Ticknor street, from Columbia road to Marine road</i>	6,601 92
<i>Tovar street, from Bowdoin street to Cameron street</i>	50 30
<i>Tuckerman street, from Dorchester street to Middle street</i>	95 56
<i>Turner street, from Washington street to Faneuil street</i>	7 00
<i>Upland avenue, from Park street to Melville avenue</i>	12 73
<i>Vista street, from Augustus avenue to Malverna road</i>	35 68
<i>Wachusett street, from Walk Hill street to Eldridge street</i>	2,106 84
<i>Waldo terrace, from Washington street to Henshaw street</i>	56 91
<i>Washington street, from Armandine street to Mora street</i>	481 80
<i>Wensley street, from Bucknam street to Bickford street</i>	63 00
	358 58
	186 68
	985 28
<i>Carried forward</i>	<hr/> \$251,971 24

PUBLIC WORKS DEPARTMENT.

315

<i>Brought forward</i>	\$251,971 24
<i>Westover street</i> , from Weld street to Dunbar street,	5 00
<i>Westwood street</i> , from Richfield street to Wales place.	193 68
<i>Wilmington avenue</i> , from Milton avenue to Nevada street	6,261 94
<i>Wordsworth street</i> , from Horace street to Coleridge street	165 53
<i>Wyoming street</i> , from Wabeno street to Humboldt avenue	194 97
	<hr/>
	\$258,792 36
Credit: Atkins street, \$44.10, and Chelsea street, \$9.19	53 29
	<hr/>
Total	<u>\$258,739 07</u>

PUBLIC WORKS DEPARTMENT — HIGHWAY DIVISION — PAVING SERVICE.
Maintenance of Macadam Streets.

Table showing cost by years of resurfacing or patching from February 1, 1914, to January 31, 1919.

	1914.	1915.	1916.	1917.	1918.
Total length of macadam in miles.....	392.27	396.28	392.91	390.04	386.97
Total area of macadam in square yards.....	7,092,634	7,147,804	7,059,095	6,913,275	6,815,543
Total cost of resurfacing of macadam *.....	\$317,134 41	\$170,760 85	\$115,268 20	\$138,452 49	\$115,285 89
Total cost of patching of macadam †.....	\$102,847 01	\$136,059 01	\$114,113 82	\$198,820 05	\$181,286 71
Cost of resurfacing per mile over entire mileage.....	\$808 46	\$430 91	\$293 37	\$354 96	\$297 92
Cost of resurfacing per square yard over entire area.....	\$0 045	\$0 024	\$0 016	\$0 02	\$0 017
Length of macadam resurfaced yearly in miles.....	26.2	13.4	11.5	10.74	12.6
Cost per mile of macadam resurfaced yearly.....	\$12,104 37	\$12,743 35	\$10,023 32	\$12,891 29	\$9,149 59
Area of macadam resurfaced yearly in square yards.....	381,063	185,215	179,093	165,401	186,337
Cost per square yard of macadam resurfaced yearly.....	\$0 832	\$0 922	\$0 644	\$1 20	\$0 619
Area of macadam patched yearly in square yards.....	477,863	680,470	445,637	788,981	230,159
Cost per square yard of macadam patched yearly.....	\$0 215	\$0 200	\$0 256	\$0 252	\$0 788
Binders used (per cent):					
Water.....	23 04	13 29	19 80	.0695	.4259
Tar preparation.....	51 13	34 88	54 96	.5831	.3695
Asphalt preparations.....	25 83	51 83	25 24	.3474	.2046

* By resurfacing is meant entire area of street excavated and resurfaced with not less than four inches of new material.

† By patching is meant scattered areas of depressions, etc., which are filled with new material from a depth of one half inch up.

New Edgestones. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Setting. Linear Feet.

YEAR.	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester and Hyde Park.	Roxbury.	City Proper.	Totals.
1909.....	723	2,898	.....	214	779	4,833	2,380	5,253	17,090
1910.....	328	1,182	100	983	5,190	8,044	6,810	50	22,687
1911.....	1,718	465	.....	2,098	11,627	14,627	5,806	352	36,693
1912.....	6,045	1,017	229	1,806	7,890	9,609	3,168	407	30,231
1913.....	2,199	557	70	1,221	2,907	10,296	2,716	1,359	21,325
1914.....	4,773	959	.....	1,970	1,520	1,637	901	672	12,432
1915.....	947	265	.....	4,939	2,230	6,928	4,547	331	20,187
1916.....	221	1,996	.....	1,987	2,393	3,378	1,968	638	12,581
1917.....	1,779	298	.....	1,159	8,225	7,180	933	524	20,098
1918.....	.....	2,498	.....	162	4,751	684	662	.....	8,757
Totals...	18,733	12,135	399	16,539	47,512	67,276	29,891	9,586	202,071

New Brick Sidewalks. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Laying. Square Yards.

YEAR.	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester and Hyde Park.	Roxbury.	City Proper.	Totals.
1909.....	311	2,597	.....	.....	156	406	5,359	.....	8,829
1910.....	1,202	974	42	166	987	596	2,230	.....	6,287
1911.....	520	364	.....	.....	.....	460	1,469	314	3,127
1912.....	2,249	623	.....	.....	.....	208	716	.....	3,796
1913.....	490	465	.....	.....	80	103	647	86	1,871
1914.....	762	379	.....	.....	.....	150	382	585	2,258
1915.....	287	465	.....	150	.....	.....	501	.....	1,403
1916.....	125	175	.....	.....	.....	.....	366	.....	666
1917.....	17	20	.....	.....	.....	105	599	40	790
1918.....	.....	95	.....	.....	.....	.....	95	40	300
Totals...	6,053	6,357	42	316	1,223	2,028	12,364	1,144	29,327

Recapitulation, 1918.

DISTRICTS.	Edgestones. Linear Feet.	Brick. Square Yards.
South Boston Paving District, No. 1.....		
East Boston Paving District, No. 2.....	2,498	95
Charlestown Paving District, No. 3.....		
Brighton Paving District, No. 4.....	162	
West Roxbury Paving District, No. 5.....	4,751	
Dorchester and Hyde Park Paving Districts, Nos. 6, 9-11.....	684	
Roxbury Paving District, No. 7.....	662	95
City Proper Paving Districts, Nos. 8 and 10.....		110
Totals.....	8,757	300

Loads of Dirt and Street Cleanings Removed from February 1, 1918,
to January 31, 1919.*By Paving Service Force.*

DISTRICTS.	Single.*	Double.†	Cubic Yards.
South Boston.....	1,015	373	1,761
East Boston.....	269	123	513
Charlestown.....	335		335
Brighton.....	2,048½	2,286	6,620½
West Roxbury.....	2,134	4,261	9,623
Dorchester.....	1,775	980	3,735
Roxbury.....	5,402	81	5,726
South End.....	384	32	448
Ashmont.....	840	2,067	4,974
North End.....	572		572
Hyde Park.....	1,669	1,353	4,375
Totals.....	16,443½	11,555	38,682½

*Single load, 1 cubic yard.

†Double load, 2 cubic yards.

Loads of Snow Removed from February 1, 1918, to January 31, 1919.*By Paving Service Force.*

DISTRICTS.	Single.*	Double.†	Cubic Yards.	Cost.‡
South Boston.....	2,350	16	4,748	\$6,804 56
East Boston.....	443	.....	886	4,960 28
Charlestown.....	.....	.....	.....	5,986 21
Brighton.....	426	198	1,446	4,469 54
West Roxbury.....	322	1,089	3,911	9,333 57
Dorchester.....	1,007	458	3,388	6,898 92
Roxbury.....	.....	.....	.....	20,327 95
South End.....	1,348	36	2,812	12,586 11
Ashmont.....	246	168	996	3,670 56
North End.....	3,284	.....	6,568	\$9,522 78
Hyde Park.....	296	168	1,096	2,441 71
Totals.....	9,722	2,133	25,851	\$87,002 19

* Single load, 2 cubic yards.

† Double load, 3 cubic yards.

‡ Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.

§ Includes cost of license.

Snow and ice removed by contract from February 1, 1918, to January 31, 1919.

There was no snow or ice removed by contract during the year 1918-19.

Summary of Volume and Cost of Snow Removed, Year Ending January 31, 1919.

Work Done by	Districts.	Teams.		Total Teams.		Cubic Yards.	Total Cubic Yards.	Cost.	Total Cost.	Cost per Cubic Yard.	Total Cost per Cubic Yard.
		Single.	Double.	Single.	Double.						
Paving Service, day work,	South Boston.....	2,350	16			4,748		\$6,304 56			
	East Boston.....	443				886		4,360 28			
	Charlestown.....							5,386 21			
	Brighton.....	426	198			1,446		4,469 54			
	West Roxbury.....	322	1,089			3,911		9,333 57			
	Dorchester.....	1,027	458			3,388		6,898 92			
	Roxbury.....							20,327 95			
	South End.....	1,348	36			2,812		12,586 11			
	Ashmont.....	246	168			996		3,780 56			
	North End.....	3,284				6,568		9,522 78			
*Paving Service, contract,	Hyde Park.....	296	168	19,722	2,133	1,096	25,851	2,441 71	\$87,002 19		
	Snow District No. 1.....										
	Snow District No. 2.....										
	Snow District No. 3.....										
	Snow District No. 4.....										
	Snow District No. 5.....										
	Snow District No. 6.....										
	Snow District No. 7.....										
	Miscellaneous.....										
	Totals.....										
Street Cleaning Service, day work.	South Boston.....	936				2,434		\$4,463 79		\$0 95	
	East Boston.....	24				62		52 59		\$0 84	
	Charlestown.....	373				970		2,001 14		91	
	Dorchester.....	64				166		502 18		85	
	Roxbury.....							1,812 59			
	South End, uptown.....	330				858		1,946 02		1 40	
	South End, downtown.....	3,120				8,112		11,191 77		1 25	
	Back Bay.....	442				1,149		1,106 25		1 72	
	North and West Ends.....	3,773				9,810		14,113 80		1 28	
	Patrol System.....	6,645				17,277		14,467 07		1 55	
Totals.....				15,707			40,838		\$51,657 20		\$0 92
				25,429	2,133		66,689		\$138,659 39		\$0 92

¹ Single, load, 2 cubic yards. ² Double load 3 cubic yards.

³ Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.

⁴ Single loads, 2 cubic yards ⁵ Includes Sunday, paid time and one half, and holidays double time.

⁶ Does not include \$12,203.15 spent by Street Cleaning Service for cleaning crosswalks and gutters not carted away.

⁷ Nothing paid during the year for the removal of snow by contract.

STREET OPENINGS.

Under Classes 1 and 2 of the schedule of permit fees, permits for openings in public ways were issued as follows:

TO WHOM ISSUED.	Permits.	Length in Feet.
City of Boston Fire Department.....	27	1,655
City of Boston Police Department.....	18	930
City of Boston Schoolhouse Commission.....	14	1,825
City of Boston Sewer Service.....	198	4,490
City of Boston Water Service.....	1,778	12,930
Boston Consolidated Gas Company.....	997	30,135
Boston Elevated Railway Company.....	285	160,470
Charlestown Gas and Electric Company.....	99	3,195
Dedham and Hyde Park Gas and Electric Company.....	34	2,600
East Boston Gas Company.....	168	5,260
Edison Electric Illuminating Company.....	744	72,450
New England Telephone and Telegraph Company.....	124	19,835
Miscellaneous.....	1,233	219,470
Bay State Street Railway Company.....	16	1,920
Quincy Market Cold Storage Company.....	12	275
Eastern Cold Storage Company.....	5	120
Western Union Telegraph Company.....	28	8,145
Emergency, Class A.....	975	.....
Emergency, Class A, returned as used.....	612	.....
Estimated length.....	.....	15,300
Totals.....	7,367	561,005

Making a total length of openings of about 106 miles.

Permits for occupation of public ways for purposes other than openings have been issued as follows:

Advertising by men wearing lettered hat and coat	4
Cleaning snow from roof	36
Driving cattle through the streets	5
Dumping snow in public alleys	11
Erecting and repairing awnings	833
Erecting and repairing buildings	761
Painting or minor repairs	2,748
Feeding horses on streets	325
Moving buildings in streets	5
Placing signs flat on buildings	720
Projecting signs or lamps	78
Carried forward	5,526

<i>Brought forward</i>	5,526
Raising or lowering safes or heavy machinery	128
Emergency permits (Class B)	254
Special permits for other than the above purposes	—
Annual permits for other purposes	333
Total	6,241
Total for openings in public ways	7,367
Total of all permits issued	<u>13,608</u>

The income from the issuance of permits amounted to \$12,099.11, divided as follows:

Class No. 1. Openings	\$3,603 00
2. Emergency openings	788 00
3. Advertising	4 00
4. Cleaning snow from roofs	36 00
5. Driving cattle	25 00
6. Dumping snow	5 50
7. Erecting and repairing awnings	416 50
8. Erecting, alterations and repairs on buildings	3,978 11
9. Minor repairs on buildings	1,374 00
10. Feeding horses	325 00
11. Moving buildings	75 00
12. Painting signs on fences	—
13. Placing flat signs	360 00
14. Projecting signs, etc.	78 00
15. Raising and lowering goods, etc.	128 00
16. Loading and unloading goods	—
17. Emergency (Class B)	254 00
18. Special	—
19. Annual permits	649 00
Total	<u>\$12 099 11</u>

Eight thousand, five hundred eleven dollars and forty-five cents cash paid to City Collector. Bills for collection of balance, \$3,587.66.

One thousand four hundred forty-four surety company bonds are on file in the Permit Office. These include twenty thousand, three thousand, four thousand and one thousand dollar bonds.

DEFECTS IN SIDEWALKS AND ROADWAYS.

Two hundred forty notices were sent to property owners to make repairs to sidewalks for the maintenance

of which they were responsible. These included steps, portions of buildings encroaching on sidewalks, and defective bulkheads, areas, etc.

Twenty-five thousand six hundred fifty notices were sent to district foremen, contractors, public service corporations and others to make repairs in the streets where defects existed on account of work for which they were responsible.

Permits have been issued for the placing of seventy-seven poles and the removal of two hundred thirty-five poles in accordance with plans filed in this office. Permits have also been issued for the resetting of seven hundred four defective poles.

STREET NUMBERING.

Building numbers have been assigned as listed below :

DISTRICTS.	Entire Streets Num- bered.	Entire Streets Renum- bered.	Partly Num- bered Streets.	Partly Renum- bered Streets.	Estates Num- bered.	Estates Renum- bered.	Figures. Issued.
East Boston	19	.....	58
Charlestown	7	.....	19
Boston	2	.....	1	41	127	591
South Boston	40	1	105
Roxbury	22	1	58
West Roxbury	49	4	125
Dorchester	5	.....	3	66	56	325
Brighton	28	2	68
Hyde Park	21	.....	56
Totals	7	.....	4	293	191	1,405

PLANS.

During the year plans were filed as follows:

To WHOM ISSUED.	Mains.	Poles.	Tracks.	Conduits.	Miscellaneous.
New England Telephone and Telegraph Company.....		24		20	
Edison Electric Illuminating Company..		30		58	
Boston Consolidated Gas Company.....	3				
Dedham and Hyde Park Gas and Electric Company.....	3				
Charlestown Gas Company.....		1			
Boston Elevated Railway Company.....		5	29	6	
Quincy Market Cold Storage Company.....				1	
Boston Pneumatic Transit Company.....				2	
Boston Low Tension Wire Association.....				1	
Boston Schoolhouse Commission.....				5	
Bay State Railway Company.....		2	1	2	
Boston Police Department.....				11	
Western Union Telegraph Company.....				5	
Union Freight Railroad Company.....			2		
American Telegraph and Telephone Company.....		1			
Boston Fire Department.....				44	
Postal Telegraph Cable Company.....		1			
Miscellaneous.....					21
Totals.....	6	64	32	155	21

Poles, 64; mains, 6; tracks, 32; conduits, 155; miscellaneous, 21; total of 278 plans filed this year, making a total of plans on file of 14,439.

TABLE SHOWING THE UNIT COST OF ASPHALT AND BITULITHIC REPAIRS PER SQUARE YARD OF STREET SURFACE FROM 1909 TO 1918, INCLUSIVE.

Trinidad Asphalt.

City Proper.

Street.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Albany street.....	80 feet north of Broadway, across Way street.	1899	\$0.005						\$0.267			
Albany street.....	East Concord street to 225 feet north of Massachusetts avenue.	1884	401	\$0.346	\$0.284	\$0.235	\$0.150	\$0.174	.311	\$0.059	\$	
Andrews street.....	East Dedham street to East Concord street.	1899	*						.009			
Arch street.....	Franklin street to Milk street.....	1893							†		\$0.004	\$0.023
Arch street.....	200 feet south of Milk street to Franklin street.	1893	.145						†			
Arch street.....	Franklin street to Summer street.....	1915							†		.026	.003
Arlington street.....	Boylston street to Beacon street.....	1901			* 010	.002	.014	.015	.056	.008	.066	.014
Ash street.....	Bennet street to Nassau street.....	1887	†								.051	
Auburn street.....	Leverett street to Poplar street.....	1911										.003
Avon street.....	Washington street to Chauncy street.....	1901			* .028	.023	.146	.045	.139	.064	.588	.374
Barton court.....	Barton street to Brighton street.....	1904						*				
Batterymarch street.....	Milk street to Liberty square.....	1896	.013	.060	.196	.319	.043	.067	.167	.119	.132	.050
Batterymarch street.....	Milk street to 93 feet west of Broad street.	1909						*	.005	.131	.089	.047

Cost of Trinidad Asphalt Repairs, 1909-18. — Continued.
City Proper.—Continued.

STREET.	Limita.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Beacon street.....	Charles street, across Arlington street,	1901										\$0.439
Beacon street.....	Charles street to Brimmer street.....	1891	\$0.064	\$0.074	\$0.192	\$0.053						
Beacon street.....	Brimmer street to Arlington street.....	1908										*
Beacon street.....	Charles street to Brimmer street and southerly side of Arlington street.	1891-1901			\$0.046	\$0.046	\$0.078	\$0.217	\$0.050	\$0.230		
Beacon street.....	Easterly side of Dartmouth street to within 150 feet of westerly line of Gloucester street.	1852	* .028									
Beacon street.....	Dartmouth street to Hereford street.....	1909					*	.018	.024	.048	.045	
Beacon street.....	Hereford street to Massachusetts avenue.	1907								.479	.090	.106
Bennet street.....	Ash street to Harrison avenue.....	1905							*			
Berkeley street.....	Boylston street to 155 feet south of Boylston street (west side).	1902				* .128	.032					
Berkeley street.....	38 feet south of Boylston street to 156 feet south of Boylston street (east side).	1902-06				*				*	.166	
Bond street.....	Hanson street to Milford street.....	1893		.036	.030	.049	.040	.082			.013	
Boylston street.....	Tremont street to Boylston place.....	1901			* .078	.322	.267	.385	\$			
Boylston street.....	Charles street to Arlington street.....	1901			* .051	.070	.052		\$			
Boylston street.....	Easterly side of Berkeley street, across Clarendon street.	1897	.038	‡ .098		.043		\$				

Cost of Trinidad Asphalt Repairs, 1909-18. — (Continued.)
City Proper.—Continued.

STREET.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Cooper street.....	Endicott street to Washington Street North.	1897	.....	.....	.....	.....	.....	.....	.....	.....	*	\$0.004
Court square.....	Easterly and southerly side.....	1881-94	\$0.046	\$0.193	\$0.290	\$0.113	\$0.021	.....	\$0.160	.....	.....	.....
Court square.....	West side, from 148 to 8 feet south of Court street.	1904	.....	.....	.....	.....	.....	*	.....	\$0.066	\$0.177	.584
Court street.....	Washington street to Court square.....	1904	.....	.....	.....	.....	.027	*\$0.233	.299	.290	.278	.449
Dartmouth street.....	Boylston street to Newbury street.....	1894	.....	.023	.110	.060	.049	†.091	.....	.....	.....	.....
Dartmouth street.....	Huntington avenue to Boylston street,	1901	.....	.....	*.039	.008	.....	.011	.....	.276	.....	.047
Davis street.....	Washington street to Harrison avenue,	1892	.173	.332	.184	.680	.106	.130	.211	.208	.225	.145
Devonshire street.....	Water street to Milk street.....	1909	.....	*	.056	.099	.459	.431	1.437	.291	.486	1.619
Devonshire street.....	Milk street to Franklin street.....	1905	.....	.....	.....	.....	.....	.....	*.426	.420	.507	.934
Dillon street.....	Lenox street to Sawyer street.....	1902	.....	.....	.....	*	.010	.....	.068	.....	.....	.....
Doane street.....	Kilby street to Broad street.....	1881	.055	†.189	.031	.224	.058	.034	.046	.....	.066	.129
Edinboro' street.....	Essex street to Beach street.....	1895	.170	.093	.377	†.229	.....	.....	.....	.....	.....	.....
Endicott street.....	Cooper street, across Thacher street.....	1899	*	.154	.177	.163	.278	.087	.027	.194	.174	.376
Exchange place.....	Congress street to Kilby street.....	1903	.....	.....	.....	.....	*	.059	.099	.....	.027	.110
Groton street.....	Washington street to Shawmut avenue,	1892	.045	.115	.041	.079	.031	.091	.144	.194	.360	.191
Hanover avenue.....	Hanover street to North street.....	1892	.102	.029	.222	.209	.107	.012	.056	.299	.093	.....
Hanover street.....	Tilston street, across Charter street (west side).	1907	*	1.358

PUBLIC WORKS DEPARTMENT.

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Harris street.....	Hanover street to North street.	1904										.080	.021
Harrison avenue.....	22 feet south of Kneeland street to 22 feet north of Harvard street.	1899	*	.271	.250	.180	.211	.320	.170	.113		.380	.456
Harrison avenue.....	East Newton street to East Springfield street.	1888-95	.233	.291	.258	.378	.081	.132	.714	.169		.153	.293
Harrison avenue.....	Asylum street, across Davis street.....	1901			* .231	.327	.150	.305	.886	.253			†
Harrison avenue.....	North side Decatur street, across Gloucester place.	1905							* .904				†
Harrison avenue.....	Union Park street, across Malden street,	1903					* .193	.040	.657	.181		.275	.066
Harrison avenue.....	Malden street to East Dedham street,	1909						*	.262	.141			
Harrison avenue.....	East Springfield street to 90 feet southerly.	1888	.078	.208		.090	.216	.332	.336	.602			
Hawes street.....	Congress street to Kilby street.....	1904						*	.050	.089			.102
Hollis street.....	Tremont street, toward Washington street.	1891	.073	.227	.295	.072	.080	.065		.144		.335	†
Hudson street.....	Beach street to 90 feet north of Curve street (minus Kneeland and Harvard streets intersection).	1891	.142	.178	.358	.224	.188	.305	.218	.142		†	.017
Huntington avenue.....	Boylston street, across Dartmouth street.	1901			* .037	.033	.007	.012	.027	.054			.129
Huntington avenue.....	Bridges over Boston & Albany Railroad to 70 feet south.	1909						*	.050				.369
Huntington avenue.....	(West Roadway) 685 feet north of West Newton street to 38 feet north of West Newton street.	1907										*	.487
Kilby street.....	State street to Central street.....	1904						* .293					.368
Kilby street.....	Central street to Milk street (including Liberty square).	1881-98	.016	.040	.045	.028	.012	.019	.558	.057		.134	.446

Cost of Trinidad Asphalt Repairs, 1909-18. — Continued.
City Proper. — Continued.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Kingston street.....	Beach street to Essex street.....	1899	*\$0.080	†\$0.355	.....	.....	.....	.....	*\$0.316	\$0.341	\$0.400	\$0.201
Laconia street.....	Washington street to Harrison avenue,	1896	.018	.224	\$0.013	\$0.117	\$0.048	\$0.075	.059	.065	†	.....
La Grange street.....	Tremont street, toward Washington street.	1897	.074	.160	.216	.147	.333	.056	.502	.081	.613	.....
Lincoln place.....	Worcester street to Springfield street,	1897	.021	.....	.242	.....	.....	.....	.....	.....	.....	.957
Lynn street.....	Cooper street to Thacher street.....	1906	.....	.....	.....	.....	.....	.....	.....	*	.140	.....
Malcolm street.....	Mt. Vernon street to Chestnut street...	1892	.104	.....	.....	.....	.666	.....	.....	.086	.....	.....
Malden street.....	Washington street to Harrison avenue,	1902	.....	.....	.....	*.004	.034	.026	.....	.079	.137	.082
Mason street.....	449 feet south of West street to 545 feet south of West street.	1909	.....	†.063	.113	.193	.190	.032	.527	.014	.....	.....
Mason street.....	Tremont street to Avery street.....	1900	.....	*	.189	.064	.042	.170	.193	.058	.....	.....
Mason street.....	West street to Tremont street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.226	.261
Massachusetts avenue.....	Columbus avenue to Tremont street (southerly roadway).	1892	.070	†.070	.....	.....	.....	.....	*	.....	.....	.....
Massachusetts avenue.....	Tremont street to Shawmut avenue (southerly roadway).	1892	.045	†.017	.....	.....	.....	.....	*	.....	.....	.....
Massachusetts avenue.....	Shawmut avenue to Washington street (southerly roadway).	1892	.021	†.066	.....	.....	.....	.....	*	.....	.....	.....
Moon street.....	North square to Lewis street.....	1891	.105	.083	.189	.248	.073	.071	.....	.132	.....	1.131
Norman street.	Green street to South Margin street. . .	1905	.....	.....	.....	.....	.....	.....	*.391	.....	.161	.....
Northampton street.....	Washington street to Shawmut avenue,	1905	*	.446	.069	.520

North Bennet street.	Hanover street to Salem street.	1904																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Cost of Trinidad Asphalt Repairs, 1909-18.—Continued.
City Proper.—Concluded.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Spring street.....	Poplar street to Leverett street.....	1895	\$0.069	\$0.128	\$0.333	\$0.160	\$0.183	\$0.128	\$0.454	\$0.422	\$0.093	\$0.066
Stevens street.....	Lincoln place, toward Shawmut ave.....	1897										
Stillman street.....	Endicott st., across North Margin st.....	1892-95	.009	.005	.035	.041	.286	.157	.081	.159	.033	1.648
Stoddard street.....	Howard street to Court street.....	1892		.176	.127	.023	.076	.066		.543		
Sun Court street.....	North street to Moon street.....	1891	.118	.080	.245	.190	.119	.043		.139		1.150
Temple place.....	Washington street to Tremont street,	1900		* .017	.154	.086	.183	.268	.504	.025	.341	.313
Thacher street.....	Washington St. North to Endicott st.,	1892	.014	.226	.267	† .127	.453	.093	.469	.214	†	
Tileston street.....	Unity street to Salem street.....	1895		.228	.640	.385	.206	.057	.243		.103	.108
Tileston street.....	Hanover street to Unity street.....	1905							*		.103	.108
Tremont street.....	Scolly square to Boylston street (minus Beacon street intersection).	1900		* .074	.319	.228	.421	.374	\$.388			
Trinity place.....	St. James ave., across Stanhope street,	1900		* .007	.013	† .127						
Trinity place.....	Stuart street, across Stanhope street.....	1900-07					.136	.004	.069			.003
Tyler street.....	Beach street to Harvard street and Harvard street to Curve street.	1917										.026
Unity street.....	Charter street to Tileston street.....	1897	.013	.126	.030	.390	.071	.078	.249	.284	.100	.100
Warrenton street.....	Eliot street to Tremont street.....	1894-91	.038	.319	.031	.059	.256	.063	.329	.049		.244
Warrenton street.....	Shawmut avenue to Washington street,	1891	.050	.233	.094	.008	.168	.125	.050	.025		.138
Water street.....	Congress street to Kilby street.....	1902				*	.014	.026	.155			.003
Water street.....	Liberty square to Broad street.....	1896	.038	.059	.213	.070	.060	.017		.051	.027	.009

Wiget street.....	1897	.045	.046	.342	.139	.029	.066	.010	.500	.070	.....
Wiggin street.....	1905	..	..	..	..	..	..	..	*	.091	.062

Charlestown.

Austin street.....	1891	\$0.142	\$0.173	\$0.821	\$0.109	\$0.087	\$0.104	\$0.199	\$0.372	\$0.165	\$0.913
Bunker Hill street.....	1897	.....	.....	.....	.....	.....	.064	.....	.....	.....	.....
Corey street.....	1897	.....	.132	.247	.....	.194	.121	.220	.....	.....	1.158
Joiner street.....	1906	.....	.....	.....	.....	.....	.....	.....	*.310	.661	.500
Moulton street.....	1897	.....	.....	.030	.....	.043	.034	.200	.....	.....	.719
Moulton street.....	1897	.008	.032	.095	.....	.044	.029	.099	.....	.....	.....
Tufta street.....	1887	.044	.....	.154	.....	.035	.042	.....	.....	.....	.210
Vine street.....	1897	.007	.027	.039	.....	.049	.010	.....	.....	.....	.046
Warren street.....	1917	.....	.....	.....	.....	.....	.....	.....	.....	†	.350
Washington Street North,	1899	.503	1.069	.039	.154	.164	.098	.405	.246	.005	.918
Over Fitchburg Railroad.....											

South Boston.

D street.....	1889	\$0.126	\$0.388	\$0.284	\$0.204	\$0.211	\$0.240	\$0.770	\$0.203	.....	\$1.028
E street.....	1892	.025	.225	.056	.075	.018	.229	.....	.389	.....	.....
F street.....	1904	.....	.....	.....	.....	.....	*.056	.....	.....	.....	.....
I street.....	1910	.....	*	.....	.....	.001	.003	.....	.....	.....	.....
Rogers street.....	1891	.....	.111	.....	.....	.....	.008	.....	.....	.....	.....
West Fifth street to Gold street.....											
West Third street to Bolton street.....											
West Seventh st. to West Eighth st.,											
East Broadway to East Fourth street,											
Dorchester street to Preble street.....											

Cost of Trinidad Asphalt Repairs, 1909-18.—*Concluded.**South Boston.—Concluded.*

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
West Sixth street.....	160 feet east of C st., toward D street,	1905							*	\$0.084		
West Third street.....	153 feet west of E street, across E st.,	1892	\$0.007	\$0.134	\$0.002	\$0.016		\$0.007	\$0.174	.020		

Roxbury.

Cabot street.....	Tremont street to Ruggles street.....	1891	\$0.014	\$0.144	\$0.178	\$0.173	\$0.048	\$0.107	\$0.054	\$0.030	\$0.193	\$0.161
Cabot street.....	Easterly side of Ruggles street to Vernon street.	1892	.108	.089	.038	.107	.030	.042	.049	.051	.020	.291
Cabot street.....	Easterly side of Vernon street to Linden Park street.	1897	.024	.011	.058	.006	.030	.042	.056	.005		.133
Columbus avenue.....	Northerly side of Camden street to 67 feet north of Station street.	1907									* .100	.143
Kent street.....	Roxbury street to Vernon street.....	1911								*		.152
Palmer street.....	121 feet east of Winslow street to 203 feet west of Eustis street.	1906								*		.709
Roxbury street.....	Washington street to Guild row.....	1904						* .024	.117		.144	
Ruggles street.....	Shawmut avenue to Cabot street.....	1907									*	.483
Vernon street.....	30 feet east of Cabot st. to Auburn st.,	1907									*	.301

Cost of Sicilian Rock Asphalt Repairs, 1909-18.

City Proper.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Acton street.....	Washington street to Bradford street,	1896	\$0.095	\$0.052	\$0.021	\$0.241	\$0.037	\$0.037	\$0.036			
Arch street.....	Summer street to Franklin street.....	1901			* .011	.028	.005	.207	†			
Ash street.....	Oak street, across Nassau street.....	1895	†									
Avory street.....	Washington street to Mason street.....	1897	.100		.261	.144		†				
Barton street.....	Leverett street to Milton street.....	1895	.005	.025	.134	.054	.084	.011	.661		\$0.099	
Beacon street.....	Arlington street to Dartmouth street,	1901			* .161	.039	.072	.072	.058	\$.041	.059	\$0.092
Boylston street.....	Arlington street to Berkeley street.....	1900		*	.329	.154	.020		§			
Bradford street.....	Waltham street to Shawmut avenue.....	1897	.021	.021	.005	.034	.011	.031	.033	.14		
Cobb street.....	Washington street to Shawmut avenue.	1897		.047		.032		.024				.017
Decatur street.....	Washington street to Harrison avenue,	1892	.094	.379	.404	.283	.187	.127	.064	.449	.519	.184
Dwight street.....	Shawmut avenue to Tremont street.....	1893	.025	.028	.012	.080	.280	.043	.001	.066	.008	
Essex place.....	Essex street to Tufts street.....	1901			* .135	.087	.038	.141	.020	.367	.086	.297
Exeter place.....	Chauncy street to Harrison avenue.....	1897		.074	.043	.045	.025		.031	.052		.364
Fabin street.....	Newland street to Ivanhoe street.....	1895					.058	.101		.013		
Fay street.....	Dover street to Harrison avenue.....	1894	.015	.033	.058	.375	.016	.032		.095	.430	
Hamburg street.....	Mystic street to Harrison avenue.....	1896	.010		.011		.089	.039		.088		
Hanover street.....	Tilston street, across Charter street (east side).	1896	.137	.344	.771	.310	.486	.187	.379	.451	.490	.622

Cost of Sicilian Rock Asphalt Repairs, 1909-18.—Continued.

City Proper.—Concluded.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Harrison avenue.....	Northampton street to Lenox street,	1903					*\$0.043	\$0.054	\$0.305		\$0.104	\$0.085
Huntington avenue.....	Boston & Albany Railroad to Massachusetts avenue.	1896	\$0.128	\$0.042	\$0.046	\$0.037	.059	.043	.061	\$0.051	.072	.139
India street.....	Milk street to India square.....	1901			*	.536	.215	.224	.365	.208	†	
Marlborough street.....	Arlington street to Clarendon street.....	1901			*.025	.006	.027	.016	.005	.002	.009	.004
Masson street.....	West street to 213 feet south of West street.	1901			*.505	.104	.055	.061	.059	.053		
Massachusetts avenue.....	Washington street to Harrison avenue (southerly roadway).	1894	.014	.080	.062	.058	.071	.138	.066	.268	.124	.250
Massachusetts avenue.....	Harrison avenue to Albany street (southerly roadway).	1894	.045	.165	.164	.056	.154	.106	.429	.157	.185	.317
Massachusetts avenue.....	Huntington avenue to Bowdoin street.	1901			*.154	.164	.214	.172	.299	.328	.280	.773
Massachusetts avenue.....	Newbury street to Beacon street.....	1901			*.341	.617	.395	.237	.310	.029	.155	.667
Mayo street.....	Castle street to Cobb street.....	1897	.027			.047		.035				.015
Meander street.....	East Dedham street to Malden street.	1896	.089	.116		.010	.049					
Morton street.....	Salem street to Endicott street.....	1901			*		.137	.075		.527		
Morton street.....	Salem street to 33 feet westerly.	1901										.686
Motte street.....	Washington street to Harrison avenue.	1892-99	.017		.150		.059	.138		.175		.042
Mystic street.....	Malden street to East Brookline street.	1895	.010	.131	.017	.006	.037	.072	.011			
Newland street.....	West Brookline st. to West Newton st.,	1902				*		.061	.014			
North Margin street.....	Thacher street, toward Endicott street,	1897	.003	.011		.085	.021	.053		.034	.132	

Norwich street.....	1896	.016	.042	.....	.043	.024	.....	.008	.....
Ohio street.....	1896	.003	.096	.009	.254	.119	.....	.....	.....
Outer street.....	1901	.....	.....	*	.016	.015	.....	.003	.....
Pemberton square.....	1894	.....	.017	.029	.....	.006	.....	.002	.032
Prince street.....	1895	.021	.093	.812	.225	.189	.314	.298	.307
Salem street.....	1901	.....	.....	*	.181	.145	.304	.408	.244
Shawmut avenue.....	1898	.194	.325	.325	.504	.114	.214	.002	.022
132 feet south of Castle street, across Cherry street.	.....	.....	.....	.....	.....	.....	↑	.....	.....
Taylor street.....	1896	.....	.084	.012	.046	.024	.069	.061	.....
Tufts street.....	1901	.....	.....	*.084	.033	.029	.018	.127	.353
Tyler street.....	1901	.....	.....	*.113	.180	.099	.102	.279	.422
Whitmore street.....	1895	.018	.137	.....	.055	.035	.....	.038	.....

South Boston.

Athens street.....	1895	\$0.073	.....	.....	\$0.102	.....	\$0.031	\$0.056	.....
Athens street.....	1892	.064	.....	.....	.059	.....	.....	.121	.....
Athens street.....	1901	.....	.....	*	.172	.....	.226	.....	.....
Bowen street.....	1901	.....	.....	*	.125	\$0.002	.021	.115	\$0.036
East Broadway.....	1897	.....	.....	*	.....	.032	.011	.063	.....
Front of Lincoln School.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gold street.....	1901	.....	.....	*\$0.004	.111	.012	.048	.....	.....
B street to D street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
K street.....	1896	.094	.215	.050	.....	.443	.049	.130	.221
East Sixth street to East Eighth street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Silver street.....	1901	.....	.....	*	.193	.....	.047	.033	.008
B street to D street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tudor street.....	1901	.....	.....	*	.193	.....	.008	.....	.....
C street to D street.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Cost of Sicilian Rock Asphalt Repairs, 1909-18. — Concluded.

South Boston. — Concluded.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
West Broadway.....	From 196 feet east of easterly line of Dorchester avenue to A street.	1892	\$0.271	\$0.352	\$0.366	\$0.105	\$0.271	\$0.307	\$0.559	\$0.495	\$0.656	\$0.119
West Broadway.....	Gardner place to 150 feet easterly.....	1893	.298	.489	.306	.312	.221	.428	.352	.433	.....	.....
West Broadway.....	150 feet west of F street to 267 feet east of F street.	1897	.049	.143	.117	.099	.059	.121	.145	.....	.....	.....
West Broadway.....	267 feet east of F street to 28 feet west of Dorchester street.	1898	.035	.084	.081	.022	.082	.132	.021	.319	.117	.....

Roxbury.

Dudley street.....	East side of Dunmore street to Maga- zine street.	1902	.....	.....	.....	*	\$0.091	\$0.114	.....	\$0.138	.....	.....
Huntington avenue	Massachusetts avenue to Gainsbor- ough street.	1896	\$0.170	\$0.015	\$0.053	.....	.012	.033	\$0.020	.117	\$0.093	.....

East Boston.

Meridian street.....	Trenton street to Eutaw street.....	1900	*	\$0.243	\$0.160	\$0.652
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Charlestown.

Lawrence street.	East side of Lawrence avenue, across Miller street.	1901	*	\$0.036	\$0.031	\$0.014	\$0.039
Miller street.	Main street to Lawrence street.	1901	.....	*	.....	.231	.027	.....	.032	.....	.170
Warren street.	Winthrop street, across Soley street.	1901	.....	*	.....	\$0.293	.543	.517	\$0.963	.626	†

Cost of Seyssel Rock Asphalt Repairs, 1909-18.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Genesee street.	Harrison avenue to Albany street.	1899	\$0.084	\$0.069	\$0.040	\$0.127	\$0.042	\$0.205	\$0.004	\$0.048	\$0.442	\$0.295
Mason street.	444 feet south of West street to Avery street.	1899	† .025	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mason street.	545 feet south of West street to 555 feet south of West street.	1899	.....	.....	.....	.....	.127	.049	.....	.140	.....	.....
Milton street.	Brighton street to Spring street.	1899	.....	.026	.052	.....	.058	.....	.099	.....	.053	.....
Owego street.	Harrison avenue to Albany street.	1899	.032	.041	.038	.075	.010	.082	.025	.050	.....	.153
Paul street.	Emerald street to Village street.	1897-99	.....	.056	.299	.042	.017	.081	.....	.198	.693	.021
Paul street.	Village street to Tremont street.	1897-99	.040	.138	.175	.065	.069	.983	.....	.240	.....	.021
Pelham street.	Washington street to Shawmut avenue.	1897	.078	.027	.028	.193	.105	.290	.145	.....	†	.....
Waterford street.	Washington street to Shawmut avenue	1897	.047	.131	.154	.168	.....	.190	.....	.....	.....	.614

* Guaranty expired.

† Repaved.

‡ Part repaved.

§ Repaved with wood block.

Cost of Acme Asphalt Repairs, 1914-18.

STREETS.	Limits.	Year Laid.	1914.	1915.	1916.	1917.	1918.
Ash street.....	Nassau street to Oak street.....	1909	*	.....	.....	\$0.027	.....
Central street.....	Broad street to Kilby street.....	1911	.....	.....	.....	.....	\$0.239
Court square.....	East roadway — 20 feet north of Williams court to south roadway from east roadway to west roadway, and west roadway from 291 feet south of Court street to 256 feet south of Court street.	1913	.....	.....	\$0.022	.116	.120
Harrison avenue.....	Malden street to East Dedham street.....	1909	*	.....	.....	.168	.508
Hayward place.....	Washington street to Harrison avenue.....	1913	.....	.....	.....	.....	*.848
Massachusetts avenue.....	Tremont street to Columbus avenue.....	1910	.....	*	.003	.062	.148
Massachusetts avenue.....	Boylston street to Boston & Albany Railroad Bridge.....	1909	*\$0.084	\$0.633	.105	.058	.881
Massachusetts avenue.....	Shawmut avenue to Tremont street.....	1910	.....	*	.004	.034	.006
Massachusetts avenue.....	Washington street to Shawmut avenue.....	1910	.....	*	.006	.085	.019
Wheeler street.....	Shawmut avenue to Corning street.....	1909	*	.....	.022	.....	.....
River street.....	Beacon street to Mt. Vernon street.....	1912	.....	.....	.....	*	.075

Summary of Table Showing the Cost of Asphalt Repairs, 1909-18.

YEAR.	Contract Awarded to	CONTRACT PRICES.			AREAS AND COST.			
		Asphalt Surface and Binder per Square Yard.	Concrete Base per Square Yard.	Extra Binder per Cubic Yard.	Total Area Not Under Guaranty Maintained by the City. Square Yards.	Cost of Maintenance for Current Year.	Unit Area Repaired.	Unit Cost per Square Yard.
1909.....	Jones & Meehan *	\$1 62	\$0 75	\$8 00	131,688	\$9,945 24	.0463	\$0 076
1910.....	Barber Asphalt Paving Company *	1 49	1 00	8 00	139,829	15,632 74	.0742	112
1911.....	Warren Brothers Company *	1 34	1 00	9 00	218,007	27,504 52	.0930	125
1912.....	Warren Brothers Company *	1 24	1 10	11 00	223,848	26,397 97	.0933	118
1913.....	Warren Brothers Company *	1 37	1 15	11 00	226,837	22,839 01	.0729	101
1914.....	Central Construction Company *	1 19	1 00	11 00	237,204	23,384 52	.0821	099
1915.....	Central Construction Company *	1 06	1 00	11 00	238,545	40,633 82	.1550	170
1916.....	Central Construction Company *	1 16	2 50	4 00	280,268	25,941 25	.0796	093
1917.....	Central Construction Company *	1 37	2 50	12 00	298,822	29,883 29	.0729	102
1917.....	Warren Brothers Company †				838 44	838 44		
1918.....	The Bermudez Company *	1 38	3 50	12 00	312,523	50,198 58	.1080	161

† By agreement.

* Advertised and awarded to lowest bidder.

Cost of Bitulithic Repairs, 1909-18.

STREETS.	Limits.	Year Laid.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Albany street.....	44 feet south of Eustis street to Hampden street.	1907									*	\$1.372
Allen street.....	Chambers street to Blossom street.....	1905							*		\$0.017	
Ashburton place.....	Bowdoin street to Somerset street.....	1904						*			.023	
Belvidere street.....	West Newton street to Massachusetts avenue.	1903					\$0.078	\$0.034	\$0.768		.004	
Berkeley street.....	Boylston street to Beacon street.....	1903					*.005	.001	.005		.025	
Berkeley street.....	Tremont street to Columbus avenue.....	1906								*		.365
Blagdon street.....	Huntington avenue to Exeter street.....	1912									†	
Blue Hill avenue.....	Dewey street to Savin street.....	1906								*	*	
Bowdoin street.....	Ashburton place to Cambridge street.....	1902			*		.164	.075	.219		.016	
Boylston street.....	Massachusetts avenue to Hemenway street.	1905							*		.654	.370
Clarendon street.....	Boylston street to Beacon street.....	1905							*.011		.003	
Dartmouth street.....	Stuart street to Huntington avenue.....	1912									*	.009
Dartmouth street.....	Newbury street to Beacon street.....	1903					*	.001	.049			
Emerald street.....	Castle street to Dover street.....	1904						*.004	.005			.178
Florence street.....	Washington street to Harrison avenue.....	1905								*	†	
Gainborough street.....	Huntington avenue to N. Y., N. H. & H. R. R.	1903					*	.032				1.067
Garden Court street.....	North street to Fleet street.....	1906				*				*	.090	
Hancock street.....	Mt. Vernon street to Cambridge street.....	1902					.009	.027	.167		.001	

Harrison avenue.....	1905					*	\$0.279	.779	.253
East Springfield street to Northampton street.									
Huntington avenue.....	1906						*	.042	.286
Dartmouth street to 84 feet north of Boston & Albany Bridge.									
Dearborn street.....	1907							*	1.380
Albany street to 56 feet south of Albany street.									
Massachusetts avenue.....	1903			* .094	.092	.834	.081	.087	.269
Columbus avenue to Huntington avenue.									
Beacon street to Harvard Bridge.....	1902			*	.300	.127	.017	.043	.136
Maverick street.....	1903			* .013			.023		
London street to Havre street.....									
Chambers street to Blossom street.....	1905					*		.025	
McLean street.....									
Moon street.....	1906						*	.072	
North square.....	1906						*	.054	.046
Onida street.....	1903			*	.005	.033	.127	.123	.003
Harrison avenue to Albany street.....									
Garden Court street to Hanover street,	1906						*	.272	
Shawmut avenue to Kent street.....	1904				* .005		.442		
St. Alphonsus street to Phillips street..	1904				* .040			†	
Tremont street across Smith street....	1905					*		.091	
St. Alphonsus street to Phillips street.,	1902			*	.042			.337	
Beach street to Harvard street.....	1905					*		†	
Tremont street to Columbus avenue,...	1904				* .003	.100			.376
Columbus avenue to Huntington avenue.	1903			* .014	.062	.098		†	
Huntington avenue, across Belvidere street.	1903			* .014	.046	.053			
West Newton street.....									

* Guaranty expired in this year.

Summary of Table Showing Cost of Bitulithic Repairs, 1913-18.

YEAR.	Contract Awarded to	CONTRACT PRICES.					AREAS AND COST.			
		Bitulithic Full Depth Patches per Square Yard.	Bitulithic Surface Patches per Square Yard.	Concrete Base per Square Yard.	Extra Binder per Cubic Yard.	Flush Coat per Square Yard.	Total Area Not Under Guaranty Maintained by the City. Square Yards.	Cost of Maintenance for Current Year.	Unit Area Repaired.	Unit Cost per Square Yard.
1913.	Warren Brothers Co.*	\$1 37	† \$0 80	\$1 15	\$11 00	.....	40,888	\$1,825 60	.0309	\$0.040
1914.	Central Construction Co.*	1 09	52	1 00	11 00	† \$0 07	62,315	1,417 89	.0531	.023
1915.	Central Construction Co.*	1 06	50	1 00	11 00	† 07	83,473	10,396 54	.1685	.125
1916.	Central Construction Co.*	1 11	50	2 50	4 00	.....	98,298	1,666 65	.0129	.018
1917.	Central Construction Co.*	1 37	77	2 50	12 00	.....	103,973	1,335 99	.0304	.036
1917.	Warren Brothers Co.†							2,382 04		
1918.	The Bernaudes Co.*	1 38	60	3 50	12 00	.....	122,814	16,244 76	.1007	.132

* Advertised and awarded to lowest bidder.

† By agreement.

LIST OF STREETS HAVING A SMOOTH PAVEMENT.

* Park roads in charge of Park and Recreation Department. † Public streets in charge of Park and Recreation Department.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
A street (South Boston).....	15 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company.....	15 {	47	1917	Oct. 18, 1922.
A street (South Boston).....	Besemer brick block gutters. Laid by Warren Brothers Company.....	}	8	1917	Oct. 18, 1922.
Academy Hill road (Brighton).....	West Broadway to 15 feet southwest of West Broadway. Acme asphalt. Laid by Warren Brothers Company.....	15 {	45	1917	Oct. 18, 1922.
Acton street (city proper).....	Besemer brick block gutters. Laid by Warren Brothers Company.....	}	8	1917	Oct. 18, 1922.
Acton street (city proper).....	At Washington street. Bitulithic. Laid by Warren Brothers Company.....	3	17	1913	
Acton street (city proper).....	10 feet west of Washington street to 6 feet east of Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	243	329	1896	
Adams street (Dorchester).....	6 feet east of Bradford street to Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	6	8	1897	
Adams street (Roxbury).....	At Bowdoin street. Topoka. (Macadam base). Laid by city force.....	13	159	1918	
Adams street (Roxbury).....	Each side of Eustis street. Bitulithic. Laid by John F. Beatty.....	2	8	1914	Sept. 4, 1919.
Addison street (East Boston).....	At Dudley street. Mack brick block. Laid by James Doherty.....	7	20	1910	
Albany street (city proper).....	At Saratoga street. Standard asphalt. Laid by Bermudes Company.....	8	32	1918	Unfinished.
Albany street (city proper).....	82 feet north of Broadway to 27 feet north of Broadway. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	55	204	1899	
Albany street (city proper).....	27 feet north of Broadway to 13 feet north of the south side of Way street. Pine wood block. Laid by New York, New Haven & Hartford Railroad Company.	55	204	1913	
Albany street (city proper).....	7 feet north of Stoughton street to 10 feet north of Massachusetts avenue. Pine wood block. Laid by Bernard E. Grant.	974	5,844	1917	Jan. 19, 1923.
Albany street (city proper and Rox- bury).....	9 feet south of Massachusetts avenue to 37 feet north of Southampton street. Pine wood block. Laid by Bernard E. Grant.	234	1,407	1917	Jan. 19, 1923.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Albany street (Roxbury).....	44 feet south of Hamden street to 7 feet north of Eustis street. Mexican asphalt. Laid by Bermudes Company.	1,608	4,881	1918	
Alford street (Charlestown).....	Malden Bridge draw. Jennison Wright slab block pavement. Laid by Boston Bridge Company.	125	611	1918	
Algonquin street (Dorchester).....	At Washington street. Fine wood block. Laid by William J. Barry.....	3	11	1913	
Allen street (city proper).....	Charles street to 2 feet east of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	2	6	1906	
Allen street (city proper).....	2 feet east of Charles street to 18 feet east of Blossom street. Mexican asphalt (macadam base). Laid by Central Construction Company.	786	2,099	1917	
Allen street (city proper).....	18 feet east of Blossom street to Chambers street. Bitulithic. Laid by Warren Brothers Company	507	1,300	1906	
Allaton street (Brighton).....	Brighton avenue to 10 feet south of Brighton avenue. Astec asphalt (macadam base). Laid by the Bermudes Company.	10	40	1917	Dec. 7, 1922.
Allaton street (Brighton).....	North street line of Commonwealth avenue to the south street line of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	129	344	1917	
Ambrose street (Roxbury).....	At Dearborn street. Mexican asphalt. Laid by Bermudes Company.....	3	10	1918	
Andrews street (city proper).....	East Dedham street to East Canton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	201	290	1899	
Appleton street (city proper).....	4 feet east of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company.	4	18	1906	
Appleton street (city proper).....	Berkeley street to 4 feet west of Berkeley street. Bitulithic. Laid by Warren Brothers Company.	4	18	1906	

Appleton street (city proper).....	4 feet west of Berkeley street to 3 feet east of Clarendon street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	504 {	2,180 314	1916 1916	Nov. 5, 1921. Nov. 5, 1921.
Appleton street (city proper).....	3 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	3	15	1914	Sept. 25, 1919.
Appleton street (city proper).....	Clarendon street to 3 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	3	14	1914	Sept. 25, 1919.
Appleton street (city proper).....	3 feet west of Clarendon street to 8 feet east of Dartmouth street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	557 {	2,151 310	1916 1916	Nov. 5, 1921. Nov. 5, 1921.
Appleton street (city proper).....	8 feet west of Dartmouth street to 9 feet east of West Canton street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	293 {	1,140 163	1916 1916	Nov. 5, 1921. Nov. 5, 1921.
Appleton street (city proper).....	91 feet east of West Canton street to 10 feet east of Columbus avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.	177	1,163	1912	
Appleton street (city proper).....	10 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	10	95	1906-07	
Arch street (city proper).....	Milk street to Franklin street. Residual asphalt. Laid by Central Construction Company.	416	1,203	1915	
Arch street (city proper).....	9 feet south of Franklin street to 12 feet north of Summer street. Residual asphalt. Laid by Central Construction Company.	382	1,383	1915	
Arch street (city proper).....	12 feet north of Summer street to Summer street. Fine wood block. Laid by Northern Construction Company.	12	63	1915	Aug. 16, 1920.
Arch street (city proper).....	Near Summer street. Trinidad asphalt. Laid by Northern Construction Company.	.....	150	1915	July 28, 1920.
Ardent street (West Roxbury).....	Colberg avenue to Belgrade avenue. Astec asphalt. Laid by Central Construction Company.	290	840	1916	Aug. 16, 1921.
Arlington street (city proper).....	31 feet south of Providence street to 10 feet south of Boylston street. Bessemer brick block. Laid by Coleman Brothers.	198	856	1918	Dec. 2, 1919.
Arlington street (city proper).....	10 feet south of Boylston street to Boylston street. Fine wood block. Laid by Clark & Gore.	10	43	1915	Oct. 9, 1920.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Arlington street (city proper)	Boylston street to 18 feet north of Boylston street. Pine wood block. Laid by Clark & Gore.	18	100	1915	Oct. 9, 1920.
Arlington street (city proper)	18 feet north of Boylston street to Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1,300	7,251	1901	
Arlington square (city proper)	Bridge over New York, New Haven & Hartford Railroad Metropolitan brick (in street car tracks). Laid by Boston Elevated Rail- way Company.	100 {	112 1,366	1901	
	Trinidad asphalt. Laid by Barber Asphalt Paving Company			1899	
Armandine street (Dorchester)	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	9	27	1918	Sept. 25, 1923.
Arthur street (Brighton)	At North Beacon street. Bitulithic. Laid by Warren Brothers Company...	10	28	1918	Dec. 24, 1923.
Ash street (city proper)	Bennet street to north side of Nassau street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	226	440	1905	
Ash street (city proper)	North side of Nassau street to 6 feet north of Oak street. Acme asphalt. Laid by Warren Brothers Company.	216	379	1909	
Ashburton place (city proper)	Somerset street to 55 feet east of Bowdoin street. Bitulithic. Laid by Warren Brothers Company.	278	665	1904	
Ashburton place (city proper)	55 feet east of Bowdoin street to Bowdoin street. Bitulithic. Laid by Warren Brothers Company.	48	111	1911	
Ashby street (Brighton)	At Commonwealth avenue. Pine wood block. Laid by Clark & Gore	19	75	1915	Sept. 2, 1920.
Aspinwall road (Dorchester)	Talbot avenue to 22 feet east of Talbot avenue. Mack brick block. Laid by James Doherty.	22	98	1911	
Aspinwall road (Dorchester)	22 feet east of Talbot avenue to 20 feet east of Talbot avenue. Mack brick crosswalks. Laid by James F. Murphy.	7	37	1907	
Aspinwall road (Dorchester)	At Washington street. Pine wood block. Laid by William J. Barry	10	56	1913	

		4	13	1901	
Astor street (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.				
Athens street (South Boston).....	West Second street to A street. Sicilian rock asphalt; bituminous concrete base. Laid by Boston Asphalt Company.	614	902	1895	
Athens street (South Boston).....	Bridges over New York, New Haven & Hartford Railroad. Pine wood block. Laid by Central Construction Company.	64	92	1918	
Athens street (South Boston).....	B street to C street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	503	726	1892	
Athens street (South Boston).....	C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan.....	508	734	1901	
Atkins street (Brighton).....	Washington street to 27 feet north of Justin road. Mexican asphalt. Laid by Central Construction Company.	618	1,490	1917	July 18, 1922.
Atwill road (West Roxbury).....	At Richwood street. Topoka. Laid by Central Construction Company...	7	18	1917	June 19, 1923.
Auburn street (city proper).....	8 feet south of Leverett street to Chambers street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	247	556	1911	
Auburn street (city proper).....	Chambers street to Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	367	764	1911	
Auburn street (Roxbury).....	Ruggles street to 7 feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	7	20	1907	
Auburn street (Roxbury).....	7 feet north of Vernon street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	7	20	1907	
Austin street (Charlestown).....	8 feet west of Seminary place to 5 feet east of Lawrence street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	143	413	1891	
Avenue Louis Pasteur (Roxbury).....	121 feet north of Longwood avenue to Longwood avenue. Mack brick block. Laid by James Doherty.	121	1,244	1910	
Avery street (city proper).....	Washington street to 10 feet west of Washington street. Pine wood block. Laid by Coleman Brothers.	10	30	1914	Nov. 6, 1919.
Avery street (city proper).....	10 feet west of Washington street to Tremont street. Bitulithic. Laid by Coleman Brothers.	415	1,200	1914	Nov. 6, 1919.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Avon street (city proper).....	Washington street to 9 feet east of Washington street. Black gum wood block. Laid by United States Wood Preserving Company.	9	20	1906	
Avon street (city proper).....	9 feet east of Washington street to Chauncy street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	428	1,061	1901	
B street (South Boston).....	14 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	14 {	45 8	1917 1917	Oct. 18, 1922. Oct. 18, 1922.
B street (South Boston).....	West Broadway southwesterly. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	.....	10 3	1917 1917	Oct. 18, 1922. Oct. 18, 1922.
Bardwell street (West Roxbury).....	South street to Ballard street. Mexican asphalt. Laid by Central Construction Company.	623	1,328	1917	June 13, 1922.
Barton court (city proper).....	Barton street to Brighton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	134	182	1904	
Barton street (city proper).....	Leverett street to Chambers street and Chambers street to 5 feet north of Milton street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	380	645	1895	
Barton street (city proper).....	5 feet north of Milton street to Milton street. Seyssel rock asphalt. Laid by Jones & Meehan.	5	8	1899	
Batterymarch street (city proper).....	93 feet west of Broad street to 7 feet east of Milk street. American rock asphalt. Laid by Jones & Meehan.	206	659	1909	
Batterymarch street (city proper).....	7 feet east of Milk street to Milk street. Pine wood block. Laid by James Doherty.	7	21	1911	
Batterymarch street (city proper).....	Milk street to 7 feet west of Milk street. Pine wood block. Laid by James Doherty.	7	21	1911	

Batterymarch street (city proper)	7 feet west of Milk street to Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	143	445	1896
Beacon street (city proper)	Tremont street to 12 feet west of Tremont street. Pine wood block. Laid by Bernard E. Grant.	12	43	1917 Oct. 21, 1922.
Beacon street (city proper)	21 feet west of Park street to Charles street. Topoka (macadam base). Laid by Bernard E. Grant.	1,688	6,167	1917 Nov. 15, 1922.
Beacon street (city proper)	Charles street to 6 feet west of Arlington street (south side). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	2,108	1901
Beacon street (city proper)	Charles street to east side of Brimmer street (north side). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	495	2,228	1891
Beacon street (city proper)	Easterly side of Brimmer street to 6 feet west of Arlington street (north side). American rock asphalt. Laid by Jones & Meehan.	364	1,519	1908
Beacon street (city proper)	6 feet west of Arlington street to 5 feet east of Dartmouth street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	1,851	9,906	1900-01
Beacon street (city proper)	5 feet east of Dartmouth street to easterly side of Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	2,285	12,134	1909
Beacon street (city proper)	Easterly side of Hereford street to Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	703	3,754	1907
Beacon street (city proper and Roxbury).	Massachusetts avenue to 10 feet east of Raleigh street. Pine wood block. Laid by Central Construction Company. Black gum wood blocks in tracks. Laid by United States Wood Preserving Company.	.....	2,229 2,511	1913 1901
Beacon street (city proper and Roxbury).	Massachusetts avenue to 10 feet east of Raleigh street. Pine wood block. Laid by United States Wood Preserving Company.	1,517	3,352	1901
Beacon street (Roxbury)	10 feet east of Raleigh street to east side of bridge over the Boston & Albany Railroad. Astec asphalt. Laid by Bermudez Company.	1,548	8,040	1917-18 June 1, 1923.
Beacon street (Brighton)	West side of Cleveland circle (Chestnut Hill avenue) to 1,011 feet west of east street line of Reservoir lane. Concrete road (25 feet wide). Laid by city force.	3,200	9,055	1917

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Beacon street (Brighton).....	1,011 feet west of east street line of Reservoir lane to Newton line. Concrete road. Laid by city force.	2,308	6,411	1916	
Belvidere street (city proper and Roxbury).....	West Newton street to 3 feet east of Massachusetts avenue. Bitulithic. Laid by Warren Brothers Company.	1,324	4,025	1902-03	
Belvidere street (Roxbury).....	3 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	3	12	1901	
Bennet street (city proper).....	Ash street to 9 feet west of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	230	452	1905	
Bennington street (East Boston).....	Bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	60	507	1906	
Benton street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	27	69	1900-07	
Berkeley street (city proper).....	Tremont street to Columbus avenue. Bitulithic. Laid by Warren Brothers Company.	1,195	4,863	1906	
Berkeley street (city proper).....	156 feet south of Boylston street to 38 feet south of Boylston street. (East side.) Trinidad asphalt. Laid by Barber Asphalt Paving Company. (West side.) Trinidad asphalt. Laid by Barber Asphalt Paving Company.	118	248 200	1906 1902	
Berkeley street (city proper).....	38 feet south of Boylston street to 15 feet south of Boylston street. Trinidad asphalt. Laid by Coleman Brothers.	23	75	1914	Nov. 3, 1919.
Berkeley street (city proper).....	15 feet south of Boylston street to Boylston street. Pine wood block. Laid by Coleman Brothers.	15	92	1914	Nov. 3, 1919.
Berkeley street (city proper).....	Boylston street to 15 feet north of Boylston street. Pine wood block. Laid by Coleman Brothers.	15	06	1914	Nov. 3, 1919.
Berkeley street (city proper).....	15 feet north of Boylston street to 119 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers in 1914; Warren Brothers in 1903.	104	430 32	1914 1903	Nov. 3, 1919.

Berkeley street (city proper).....	119 feet north of Boylston street to south street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company.	448	1,992	1903	
Berkeley street (city proper).....	South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	200	879	1916	Nov. 22, 1921.
Berkeley street (city proper).....	North street line of Commonwealth avenue to 3 feet south of Marlborough street. Bitulithic. Laid by Warren Brothers Company.	262	1,164	1903	
Berkeley street (city proper).....	East side of Marlborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	5	25	1901	
Berkeley street (city proper).....	North side of Marlborough street to Beacon street. Bitulithic. Laid by Warren Brothers Company.	262	1,164	1903	
Bernard street (Dorchester).....	At Talbot avenue (crosswalks). Mack brick block. Laid by James Doherty.	23	155	1911	
Bickford street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	23	1910	
Binney street (Roxbury).....	At Longwood avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	32	1910	
Birch street (West Roxbury).....	Penfield street to 6 feet east of Albano street. Bitulithic. Laid by A. H. Archer.	346	898	1915	Sept. 30, 1920.
Birch street (West Roxbury).....	6 feet west of Albano street to 416 feet west of Albano street. Bitulithic. Laid by A. H. Archer.	410	1,048	1915	Sept. 30, 1920.
Bird street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	29	1910-11	
Blagden street (city proper).....	Huntington avenue to Exeter street. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.	489	1,882	1912	
Blake street (Dorchester and Hyde Park).....	North side of Randolph road to 109 feet south of Randolph road. Mexican asphalt. Laid by Central Construction Company.	148	415	1917	July 20, 1922.
Blandford street (Roxbury).....	At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	14	45	1917	May 21, 1923.
Blossom street (city proper).....	1 foot south of Parkman street to Parkman street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1	3	1898	

List of Streets Having a Smooth Pavement — *Continued.*

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Quantity Expires.
Blossom street (city proper).....	Parkman street to Allen street. Acme asphalt. Laid by Warren Brothers Company. Besmer brick block gutters. Laid by Warren Brothers Company.....	508 {	1,237	1917	Nov. 15, 1922.
Blue Hill avenue (Dorchester).....	At Norfolk street. Bitulithic (macadam base). Laid by Warren Brothers Company.	.....	261	1917	Nov. 15, 1922.
Blue Hill avenue (Roxbury).....	At Dudley street. Mack brick block. Laid by James Doherty.....	9	133	1918	Nov. 4, 1923.
Blue Hill avenue (Roxbury).....	9 feet south of Dewey street to 12 feet north of Savin street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	577	41	1910	
Blue Hill avenue (Roxbury).....	Brunswick street to north side of Devon street. Bitulithic. Laid by Warren Brothers Company.	199	1,450	1917	
Blue Hill avenue (Roxbury).....	West side of Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company.	.....	509	1906	
Boardman street (East Boston).....	At Saratoga street. Standard asphalt. Laid by Bernudez Company.....	8	346	1917	Sept. 17, 1922.
Bolton street (South Boston).....	Bridge over New York, New Haven & Hartford Railroad. Pine wood block. Laid by Central Construction Company.	64	51	1918	Unfinished.
Bolton street (South Boston).....	C street to D street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	501	92	1918	
Bond street (city proper).....	Hanson street to Millford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	182	724	1905	
Bosworth street (city proper).....	At Tremont street. Pine wood block. Laid by Coleman Brothers.....	13	404	1895	
Bowdoin street (city proper).....	Beacon street to south side of Ashburton place. Caston block. Brick block.	380	28	1915	June 20, 1920
Bowdoin street (city proper).....	North side of Ashburton place to 17 feet south of Cambridge street. Bitulithic. Laid by Warren Brothers Company.	837	1,013	1902	
			2,205	1902	

Bowdoin street (Dorchester).....	78 feet west of Mt. Ida road to 2 feet east of west side of Quincy street. Pine wood block. Laid by James Doherty.	386	1,885	1909
Rowdoin street (Dorchester).....	2 feet east of west side of Quincy street to 96 feet west of Winter street (east side tracks.) Topoka (macadam base). Laid by city force.	1,033	3,857	1918
Rowdoin street (Dorchester).....	96 feet west of Winter street to Hancock street. Mack brick block. Laid by Central Construction Company.	310	1,438 983	1910-11 1913
Bowdoin street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	14	100	1912
Bowen street (South Boston).....	C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan.....	509	735	1901
Bowen street (South Boston).....	D street to E street. Sicilian rock asphalt. Laid by Jones & Meehan.....	514	742	1901
Bowen street (South Boston).....	E street to F street. Bitulithic. Laid by Warren Brothers Company.....	500	722	1903
Bowen street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	4	6	1905
Boylston road (Roxbury).....	Boston & Albany Railroad Bridge to Hemenway street. Back Bay Fens. Bitulithic (macadam base). Laid by Warren Brothers Company.	1,100	8,253	1918 Aug. 15, 1923.
Boylston street (city proper).....	Washington street to Tremont street. Pine wood block. Laid by Warren Brothers Company.	479	2,000	1917 Aug. 15, 1922.
Boylston street (city proper).....	Tremont street to 9 feet west of Tremont street. Pine wood block. Laid by Bernard E. Grant.	9	48	1917 Nov. 15, 1922.
Boylston street (city proper).....	9 feet west of Tremont street to the west street line of Boylston place. Pine wood block. Laid by Fred S. Gore.	352	1,326	1915 April 1, 1920.
Boylston street (city proper).....	West street line of Boylston place to 89 feet east of Carver street. Pine wood block. Laid by United States Wood Preserving Company.	155	569	1901
Boylston street (city proper).....	89 feet east of Carver street, across Arlington street. Pine wood block. Laid by Clark & Gore.	1,192	8,863	1915 Oct. 9, 1920.
Boylston street (city proper).....	Arlington street, across Berkeley street. Pine wood block. Laid by Coleman Brothers.	776	4,251	1914 Nov. 3, 1919.
Boylston street (city proper).....	Berkeley street, across Clarendon street. Pine wood block. Laid by Coleman Brothers.	612	3,400	1914 Nov. 3, 1919.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Boylston street (city proper).....	At Huntington avenue. Bitulithic. Laid by Coleman Brothers.....	.....	68	1914	Nov. 3, 1919.
Boylston street (city proper).....	Clarendon street, across Dartmouth street. Pine wood block. Laid by Coleman Brothers.....	650 -	3,543	1914	Nov. 3, 1919.
Boylston street (city proper).....	Dartmouth street to east side of Exeter street. Pine wood block. Laid by Coleman Brothers.....	548	3,044	1914	Nov. 3, 1919.
Boylston street (city proper).....	At Exeter street (in tracks). Pine wood block. Laid by Coleman Brothers.....	.....	68	1914	Nov. 3, 1919.
Boylston street (city proper).....	East side of Exeter street to 107 feet west of Exeter street. Bitulithic. Laid by Coleman Brothers.....	144	417	1914	Nov. 3, 1919.
Boylston street (city proper and Roxbury).....	107 feet west of Exeter street to 8 feet east of Hereford street. Bitulithic. Laid by Warren Brothers Company.....	1,501	5,481	1913	
Boylston street (Roxbury).....	14 feet west of St. Cecilia street to 5 feet east of Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	221	778	1904	
Boylston street (Roxbury).....	5 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.....	5	17	1901	
Boylston street (Roxbury).....	Massachusetts avenue to 3 feet west of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.....	3	12	1901	
Boylston street (Roxbury).....	3 feet west of Massachusetts avenue to westerly street line of Hemenway street. Bitulithic. Laid by Warren Brothers Company.....	387	1,384	1905	
Boylston street (West Roxbury).....	At South street. Aztec asphalt (macadam base). Laid by Bermudez Company.....	3	9	1918	Sept. 28, 1923.
Braddock park (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	9	34	1906-07	
Bradford street (city proper).....	Waltham street to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.....	583	1,223	1897	

Bradlee street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	3	11	1913
Brattle square (city proper).....	7 feet north of Brattle street to 6 feet south of Elm street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	268	683	1888
Brent street (Dorchester).....	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	10	33	1918 Sept. 25, 1923.
Brighton avenue (Brighton).....	Street line of Commonwealth avenue to 2 feet east of Harvard avenue. Astec asphalt (macadam base). Laid by Bermudez Company.	1,895	9,284	1917 Dec. 7, 1922.
Brighton avenue (Brighton).....	2 feet east of Harvard avenue to 1 foot west of Harvard avenue. Bitulithic. Laid by Coleman Brothers.....	37	230	1914
Brighton avenue (Brighton).....	Pine wood block (street car tracks). Laid by Coleman Brothers.....	6	89	1914 Aug. 7, 1919.
Brighton avenue (Brighton).....	1 foot west of Harvard avenue to Cambridge street. Astec asphalt (macadam base). Laid by Bermudez Company.	1,243	6,637	1917 Dec. 7, 1922.
Brighton street (city proper).....	Between Leverett street and Poplar street (not including next item). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	599	809	1892
Brighton street (city proper).....	Between Leverett street and Chambers street. Acme asphalt. Laid by Warren Brothers Company.	.....	523	1908
Brighton street (city proper).....	Poplar street to 7 feet north of Allen street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	233	488	1892
Brighton street (city proper).....	7 feet north of Allen street to Allen street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	7	27	1917
Brimmer street (city proper).....	Beacon street to center of Byron street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	116	322	1895
Brimmer street (city proper).....	Center of Byron street to Chestnut street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	180	536	1906
Brimmer street (city proper).....	Chestnut street to Pinckney street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	791	2,442	1895
Brinsley street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	5	26	1912
Broadway (city proper).....	Park square to Eliot street. Black gum wood block. Laid by United States Wood Preserving Company.	93	425	1907

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Broadway (city proper).....	Eliot street to Tremont street. Pine wood block. Laid by Coleman Brothers.	984	4,405	1913-14	
Broadway (city proper).....	Bridge over Boston Elevated Railway. Pine wood block. Laid by Coleman Brothers.	55	244	1913	
Broadway (city proper).....	Shawmut avenue to Washington street. Pine wood block. Laid by Coleman Brothers.	408	1,917	1913	
Broadway (city proper).....	105 feet west of Albany street to Albany street. Pine wood block. Laid by New York, New Haven & Hartford Railroad Company.	106	611	1918	
Broadway (city proper and South Boston).....	Drawbridge over Fort Point channel. Pine wood block. Laid by Boston Bridge Works.	210	984	1914	
Bromfield street (city proper).....	At Tremont street. Pine wood block. Laid by Coleman Brothers.....	12	31	1915	June 20, 1920.
Brookline avenue (Roxbury).....	Beacon street to 29 feet north of Newbury street. Aztec asphalt (macadam base). Laid by Bermudez Company.	306	1,473	1918	June 1, 1923.
Brooks street (Brighton).....	Bridge over Boston & Albany Railroad (central roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company.	.....	130	1902	
Browning avenue (Dorchester).....	Bernard street to Wales street. Bitulithic. Laid by H. J. McGuire.....	791	2,384	1914	Dec. 16, 1919.
Brunswick street (Roxbury and Dorchester).....	Blue Hill avenue to Normandy street. Aztec asphalt. Laid by Central Construction Company.	638	1,349	1916	Sept. 13, 1921.
Buckingham street (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	4	13	1906	
Bunker Hill street (Charlestown).....	At Tufts street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	161	1907	
Burke street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	26	66	1906	

	2	12	1913
Burroughs street (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	1913
Byron street (East Boston).....	8 feet south of Saratoga street to Saratoga street. Standard asphalt. Laid by Bernudez Company.	8	1918
Byron street (East Boston).....	Saratoga street to 8 feet west of Saratoga street. Standard asphalt. Laid by Bernudez Company.	8	1918
C street (South Boston).....	13 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.....	13 { 44 7	1917 1917
Cabot street (Roxbury).....	180 feet west of Tremont street to Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1,236	1891
Cabot street (Roxbury).....	Easterly side of Ruggles street to 7 feet east of Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	716	1892
Cabot street (Roxbury).....	7 feet east of Vernon street to 7 feet north of Linden Park street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	477	1897
Cabot street (Roxbury).....	7 feet north of Linden Park street to Linden Park street. Mack brick block. Laid by J. E. Burns & Co.	7	1909
Callender street (Dorchester).....	51 feet west of Carlos street to 17 feet east of Blue Hill avenue. Trinidad asphalt. Laid by D. M. Biggs & Co.	1,241	1915
Cambridge street (Brighton).....	At Brighton avenue. Aztec asphalt (macadam base). Laid by Bernudez Company.	250	1917
Cambridge street (Brighton).....	(Northerly side.) 163 feet east of North Beacon street to 65 feet west of North Beacon street. Bitulithic. Laid by Warren Brothers Company.	305	1918
Cambridge street (Brighton).....	224 feet west of Elko street to Washington street. Bitulithic. Laid by Warren Brothers Company.	169	1913
Cambridge street (Brighton).....	224 feet west of Elko street to Washington street. (Rows to street car rails.) Fine wood block. Laid by Warren Brothers Company.	38	1913
Camden street (city proper).....	Both sides of Columbus avenue (crosswalks). Bernudez asphalt. Laid by Boston Asphalt Company.	18	1906
Capen street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	8	1914
			July 11, 1919

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Broadway (city proper).....	Ellet street to Tremont street. Pine wood block. Laid by Coleman Brothers.	994	4,405	1913-14	
Broadway (city proper).....	Bridge over Boston Elevated Railway. Pine wood block. Laid by Coleman Brothers.	55	244	1913	
Broadway (city proper).....	Shawmut avenue to Washington street. Pine wood block. Laid by Coleman Brothers.	408	1,917	1913	
Broadway (city proper).....	105 feet west of Albany street to Albany street. Pine wood block. Laid by New York, New Haven & Hartford Railroad Company.	106	611	1918	
Broadway (city proper and South Boston).	Drawbridge over Fort Point channel. Pine wood block. Laid by Boston Bridge Works.	210	984	1914	
Bromfield street (city proper).....	At Tremont street. Pine wood block. Laid by Coleman Brothers.....	12	31	1915	June 20, 1920.
Brookline avenue (Roxbury).....	Beacon street to 29 feet north of Newbury street. Astec asphalt (macadam base). Laid by Bermudez Company.	306	1,473	1918	June 1, 1923.
Brooks street (Brighton).....	Bridge over Boston & Albany Railroad (central roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company.	.....	130	1902	
Browning avenue (Dorchester).....	Bernard street to Wales street. Bitulithic. Laid by H. J. McGuire.....	791	2,284	1914	Dec. 16, 1919.
Brunswick street (Roxbury and Dorchester).	Blue Hill avenue to Normandy street. Astec asphalt. Laid by Central Construction Company.	638	1,849	1916	Sept. 13, 1921.
Buckingham street (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	4	13	1906	
Bunker Hill street (Charlestown).....	At Tufts street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	161	1907	
Burke street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	26	66	1906	

Burroughs street (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	12	1913	Unfinished.
Byron street (East Boston).....	8 feet south of Saratoga street to Saratoga street. Standard asphalt. Laid by Bermudez Company.	8	32	1918	Unfinished.
Byron street (East Boston).....	Saratoga street to 8 feet west of Saratoga street. Standard asphalt. Laid by Bermudez Company.	8	86	1918	Unfinished.
C street (South Boston).....	12 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company. Bossenior brick block gutters. Laid by Warren Brothers Company.	13 { 44 7		1917 1917	Oct. 18, 1922. Oct. 18, 1922.
Cabot street (Roxbury).....	180 feet west of Tremont street to Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1,236	3,571	1891	
Cabot street (Roxbury).....	Easterly side of Ruggles street to 7 feet east of Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	716	2,967	1892	
Cabot street (Roxbury).....	7 feet east of Vernon street to 7 feet north of Linden Park street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	477	1,376	1897	
Cabot street (Roxbury).....	7 feet north of Linden Park street to Linden Park street. Mack brick block. Laid by J. E. Burns & Co.	7	35	1909	
Callender street (Dorchester).....	51 feet west of Carlos street to 17 feet east of Blue Hill avenue. Trinidad asphalt. Laid by D. M. Biggs & Co.	1,241	3,988	1915	Sept. 15, 1920.
Cambridge street (Brighton).....	At Brighton avenue. Astec asphalt (macadam base). Laid by Bermudez Company.	.....	250	1917	Dec. 7, 1922.
Cambridge street (Brighton).....	(Northerly side.) 163 feet east of North Beacon street to 65 feet west of North Beacon street. Bitulithic. Laid by Warren Brothers Company.	305	409	1918	Dec. 24, 1923.
Cambridge street (Brighton).....	224 feet west of Elko street to Washington street. Bitulithic. Laid by Warren Brothers Company.	169	1,400	1913	
Cambridge street (Brighton).....	224 feet west of Elko street to Washington street. (Brows to street car rails.) Pine wood block. Laid by Warren Brothers Company.	.....	38	1913	
Camden street (city proper).....	Both sides of Columbus avenue (crosswalks). Bermudez asphalt. Laid by Boston Asphalt Company.	18	68	1906	
Capen street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	8	25	1914	July 11, 1919

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Carleton street (city proper).....	At West Newton street. Bitulithic. Laid by Central Construction Company.	2	4	1917	
Carlow street (Roxbury).....	At Albany street. Mexican asphalt. Laid by Bermudez Company.....	1	2	1918	
Carmel street (Roxbury).....	Tremont street to Delle avenue. Bitulithic. Laid by Warren Brothers Company.	250	583	1918	April 29, 1923.
Carolina avenue (West Roxbury).....	At South street. Bitulithic. Laid by Warren Brothers Company.....	1	3	1913	
Carver street (city proper).....	Boylston street to 12 feet south of Boylston street. Pine wood block. Laid by Clark & Gore.	12	.27	1915	Oct. 9, 1920.
Carver street (city proper).....	14 feet north of Broadway to Broadway. Pine wood block. Laid by Coleman Brothers.	14	63	1913	
Castlegate road (Roxbury).....	Normandy street to Blue Hill avenue. Roman road. Laid by Roman Road Company.	433	1,250	1915	Aug. 20, 1920.
Cazenove street (city proper).....	Columbus avenue to 45 feet southerly; also the intersection of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	45	134	1899	
Cazenove street (city proper).....	At Chandler street. Acme asphalt (macadam base). Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	3 {	5 2	1916 1916	Oct. 28, 1921. Oct. 28, 1921.
Cedric street (Roxbury).....	Magazine street to Langdon street. Aztec asphalt. Laid by Central Construction Company.	610	1,366	1916	Nov. 11, 1921.
Central street (city proper).....	Broad street to Kilby street. Acme asphalt. Laid by Warren Brothers Company.	308	886	1911	
Centre street (Dorchester).....	70 feet east of Washington street to Washington street. Pine wood block. Laid by William J. Barry.	70	255	1913	

Centre street (West Roxbury).....	Green street to 18 feet west of Eliot street. Bitulithic. Laid by Warren Brothers Company. Pine wood block. (Brows to street car rails.) Laid by Warren Brothers Company.	1,370 {	5,260 283	1913 1913
Centre street (West Roxbury).....	At Richwood street. Topoka. Laid by Central Construction Company.	68		1917
Centerville park (Dorchester).....	Bourneside street to Upland avenue. Aztec asphalt. Laid by Central Construction Company.	515	2,219	1916
Chambers street (city proper).....	Green street, across Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	460	1,022	1902
Chambers street (city proper).....	Brighton street to 6 feet west of Auburn street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	152	337	1895
Chambers street (city proper).....	6 feet west of Auburn street to 8 feet east of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	112	249	1895
Chandler street (city proper).....	9 feet west of Arlington square to 3 feet east of Berkeley street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	504	2,216	1912
Chandler street (city proper).....	3 feet east of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company.	3	13	1906
Chandler street (city proper).....	Berkeley street to 3 feet west of Berkeley street. Bitulithic. Laid by Warren Brothers Company.	3	17	1906
Chandler street (city proper).....	3 feet west of Berkeley street to 2 feet east of Clarendon street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Besemer brick block gutters. Laid by Warren Brothers Company.	566 {	2,211 296	1916 1916
Chandler street (city proper).....	2 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	2	8	1914
Chandler street (city proper).....	Clarendon street to 9 feet east of Columbus avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company. Besemer brick block gutters. Laid by Warren Brothers Company.	548 {	2,155 290	1916 1916
Chandler street (city proper).....	9 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	44	1906
Charles street (city proper).....	At Boylston street. Pine wood block. Laid by Clark & Gore.	14		1915
				Oct. 9, 1920.
				Oct. 28, 1921. Oct. 28, 1921. Sept. 25, 1919.
				Oct. 28, 1921. Oct. 28, 1921.

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Charles street (city proper).....	Southerly side of Fruit street, across Allen street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	709 {	783	1916	
Charles street (Dorchester).....	Standard asphalt. Laid by Central Construction Company.....		960	1916	
* Charlesgate East (Roxbury).....	East street line of Ditson street to Geneva avenue. Concrete road. Laid by city force.	494	1,327	1916	
* Charlesgate East (Roxbury).....	Beacon street to Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	333	1,039	1918	Aug. 15, 1923.
* Charlesgate East (Roxbury).....	Commonwealth avenue to Boston & Albany Railroad. Bitulithic (macadam base). Laid by Warren Brothers Company.	341	972	1918	Aug. 15, 1923.
* Charlesgate West (Roxbury).....	Beacon street to Commonwealth avenue, Back Bay Fens. Bitulithic (mac- adam base). Laid by Warren Brothers Company.	205	689	1918	Aug. 15, 1923.
* Charlesgate West (Roxbury).....	Commonwealth avenue to Boston & Albany Railroad Bridge, Back Bay Fens. Bitulithic (macadam base). Laid by Warren Brothers Company.	350	1,340	1918	Aug. 15, 1923.
* Charlesgate West (Roxbury).....	(Easterly branch) Commonwealth avenue to 172 feet southwest, near New- bury street. Bitulithic (macadam base). Laid by Warren Brothers Company.	172	607	1918	Aug. 15, 1923.
Charter street (city proper).....	Hanover street to 14 feet west of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	14	50	1896	
Charter street (city proper).....	14 feet west of Hanover street, across Unity street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	306	615	1894	
Chase street (Dorchester).....	East Cottage street to Willis street. Trinidad asphalt. Laid by Central Construction Company.	307	856	1915	July 15, 1920.
Chauncy street (city proper).....	Summer street to 6 feet south of Summer street. Pine wood block. Laid by Northern Construction Company.	6	29	1915	Aug. 16, 1920.
Chelsea Bridge South (Charlestown)...	252 feet north of south side of Scott's court to south side of draw. Bessemer brick block. Laid by Rendle & Stoddard.	194	730	1914	April 24, 1919.

			1914	April 24, 1919.
Chelsea Bridge South (Charlestown)....	North side of draw to 140 feet north of north side of draw. Bessemer brick block. Laid by Rendle & Stoddard.	140	810	1914
Chelsea Bridge North (Charlestown)....	South side draw to Chelsea line. W. & A. composite. Wood and asphalt pavement. Wood block. Laid by Boston Bridge Works, Inc.	319	1,418	1913
Cherry street (city proper).....	7 feet west of Washington street to 8 feet east of Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	319	567	1892
Cherry street (city proper).....	8 feet east of Shawmut avenue to Shawmut avenue. Silliman rock asphalt. Laid by Boston Asphalt Company.	8	14	1898
Chester street (Brighton).....	Commonwealth avenue to 20 feet north of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	20	50	1917
Chester street (Brighton).....	10 feet south of Brighton avenue to Brighton avenue. Astec asphalt (macadam base). Laid by Bermudea Company.	10	22	1917
Chester street (Brighton).....	Brighton avenue to 10 feet north of Brighton avenue. Astec asphalt (macadam base). Laid by Bermudea Company.	10	22	1917
Chestnut street (city proper).....	At Brimmer street. Trinidad asphalt. Laid by Central Construction Company.	1	3	1915
Chestnut Hill avenue (Brighton).....	At Washington street. Bitulithic. Laid by Warren Brothers Company....	4	20	1913
Chestnut Hill avenue (Brighton).....	Intersection of north roadway, Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	90	587	1918
Child street (West Roxbury).....	At South street. Bitulithic. Laid by Warren Brothers Company.....	3	11	1913
Chilmark street (Brighton).....	At Commonwealth avenue. Pine wood block. Laid by Clark & Gore.....	19	76	1915
Chipman street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	1	4	1913
Chiswick road (Brighton).....	At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	46	170	1918
Church street (city proper).....	Boylston street to 55 feet south of Boylston street. Pine wood block. Laid by Clark & Gore.	55	103	1915
Church street (city proper).....	55 feet south of Boylston street to 10 feet north of Providence street. Pine wood block. Laid by Coleman Brothers.	100	292	1913

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Church street (city proper).....	7 feet south of Fayette street to 8 feet north of Melrose street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	175	521	1911	
Claremont park (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906	
Clarendon street (city proper).....	11 feet north of Tremont street to 4 feet south of Warren avenue. Bitulithic. Laid by Warren Brothers Company.	320	1,422	1914	Sept. 25, 1919.
Clarendon street (city proper).....	Each side of Warren avenue. Pine wood block. Laid by Boston Paving Company.	8	40	1913	
Clarendon street (city proper).....	4 feet north of Warren avenue to 5 feet south of Columbus avenue. Bitulithic. Laid by Warren Brothers Company.	855	3,806	1914	Sept. 25, 1919.
Clarendon street (city proper).....	5 feet south of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	5	24	1906	
Clarendon street (city proper).....	15 feet south of Boylston street to Boylston street. Pine wood block. Laid by Coleman Brothers.	15	60	1914	Nov. 3, 1919.
Clarendon street (city proper).....	Boylston street to 14 feet north of Boylston street. Pine wood block. Laid by Coleman Brothers.	14	56	1914	Nov. 3, 1919.
Clarendon street (city proper).....	14 feet north of Boylston street to 46 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers.	32	101	1914	Nov. 3, 1919.
Clarendon street (city proper).....	46 feet north of Boylston street to south street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company.	521	2,121	1905	
Clarendon street (city proper).....	South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	200	730	1916	Nov. 22, 1921
Clarendon street (city proper).....	North street line of Commonwealth avenue to Beacon street. Bitulithic. Laid by Warren Brothers Company.	565	2,260	1905	

Clark street (city proper).....	Hanover street to 18 feet east of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	18	35	1896	
Clark street (city proper).....	18 feet east of Hanover street to 8 feet west of North street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	293	566	1892	
Clarkwood street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.	8	25	1918	Nov. 4, 1923.
Claybourne street (Dorchester).....	187 feet south of Dakota street to Park street. Bitulithic. Laid by James Doherty.	914	2,654	1915	Sept. 10, 1920.
Cleveland place (city proper).....	Margaret street to 192 feet northwest of Margaret street. Concrete (artificial stone).	192	293	1918	May 29, 1923.
Cobb street (city proper).....	9 feet west of Washington street to 9 feet east of Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	329	987	1897	
Cobb street (city proper).....	9 feet east of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	9	27	1898	
Colonial avenue (Dorchester).....	At Talbot avenue. Brick block. Laid by James Doherty.	16	87	1911	
† Columbia road (Dorchester).....	Bridge over New York, New Haven & Hartford Railroad. Metropolitan brick.	163	362	1903	
† Columbia road (Dorchester).....	Bridge over Shoreham street. Mack brick.	59	131	1902	
* Columbia road (Dorchester).....	Edward Everett square to Stoughton street (east roadway). Bitulithic (macadam base). Laid by Warren Brothers Company.	1,416	4,444	1915	May 26, 1920.
Columbia road (Dorchester).....	83 feet south of Dudley street to 50 feet north of Hancock street (east side). Topeka (Telford macadam base). Laid by city force.	303	713	1918	
Columbia road (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	.....	210	1911	
* Columbia road (Dorchester).....	Mack brick block. Laid by city force.	.....	152	1918	
	Hancock street to Blue Hill avenue (east roadway). Bitulithic (macadam base). Laid by Warren Brothers Company.	7,015	22,135	1915	May 26, 1920.
Columbia road (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.	20	68	1912	
Columbus avenue (city proper).....	134 feet south of Ferdinand street to Boston & Albany Railroad Bridge. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	912	3,570	1904	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Quantity Expires.
Columbus avenue (city proper)	Bridge over New York, New Haven & Hartford Railroad (in street car tracks). Metropolitan brick block. Laid by Boston Elevated Railway Company.	.....	149	1906	
Columbus avenue (city proper)	See Casenove street.				
Columbus avenue (city proper)	Boston & Albany Railroad Bridge to northerly side of Camden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	4,083	15,742	1906-07	
Columbus avenue (city proper and Roxbury)	Northerly side of Camden street to 67 feet north of Station street. Bermudes asphalt. Laid by Boston Asphalt Company.	3,846	15,579	1906-07	
Columbus avenue (Roxbury)	At Walnut avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company.	8	60	1917	Sept. 17, 1922.
Columbus square (city proper)	Columbus avenue to 9 feet east of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	46	1906	
Columbus square (city proper)	9 feet east of Columbus avenue to 4 feet east of Pembroke street. Bitulithic. Laid by Fred S. & A. D. Gore Company.	235	1,774	1912	
† Commonwealth avenue (city proper)	Arlington street to Berkeley street. Bitulithic (macadam base). Laid by Warren Brothers Company.	631	4,718	1916	Nov. 22, 1921.
† Commonwealth avenue (city proper)	Berkeley street to Clarendon street. Bitulithic (macadam base). Laid by Warren Crothers Company.	580	4,340	1916	Nov. 22, 1921.
† Commonwealth avenue (city proper)	Clarendon street to Dartmouth street. Bitulithic (macadam base). Laid by Warren Brothers Company.	575	4,016	1916	Nov. 22, 1921.
† Commonwealth avenue (city proper)	Dartmouth street to Exeter street. Bitulithic (macadam base). Laid by Warren Brothers Company.	565	3,837	1916	Nov. 22, 1921.
† Commonwealth avenue (city proper)	Exeter street to Massachusetts avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	2,320	17,634	1916	Sept. 11, 1921.

† Commonwealth avenue (Roxbury)...	Massachusetts avenue, across Charlegette West. Bitulithic (macadam base). Laid by Warren Brothers Company.	1,107	8,340	1918	Nov. 1, 1923.
† Commonwealth avenue (Roxbury)...	Charlegette West to street line of Beacon street. Bitulithic (macadam base). Laid by Warren Brothers Company. Asphalt block gutters. Laid by Warren Brothers Company. Aztec asphalt (macadam base). Laid by Bernandez Company.	908 { 7,443 483 533		1916 1918	Sept. 11, 1921. June 1, 1923.
† Commonwealth avenue (Roxbury and Brighton).	Beacon street to Cottage Farm Bridge (north roadway). Pine wood block. (South roadway). Mexican asphalt (macadam base). Laid by Central Construction Company.	3,802	19,592	1915	Sept. 2, 1920.
† Commonwealth avenue (Brighton)...	Cottage Farm Bridge over Boston & Albany Railroad. Sicilian rock asphalt. Laid by Boston Asphalt Company.	140	1,556	1896	
† Commonwealth avenue (Brighton)...	Cottage Farm Bridge, across Brighton avenue (not including next item). Mexican asphalt (macadam base). Laid by Central Construction Company.	3,591	20,243	1917-18	
† Commonwealth avenue (Brighton)...	(South roadway). 11 feet west of Winlow road to 210 feet west of Naples road. Endurite (macadam base). Laid by Warren Brothers Company.		1,577	1912	
† Commonwealth avenue (Brighton)...	Brighton avenue to Harvard avenue (side roads). Mexican asphalt (macadam base). Laid by Central Construction Company.	35	9,354	1917-18	May 21, 1923.
† Commonwealth avenue (Brighton)...	Harvard avenue to the east curb line of Allston street (side roads). Mexican asphalt (macadam base). Laid by Central Construction Company.	21	9,348	1917-18	May 21, 1923.
† Commonwealth avenue (Brighton)...	West curb line of Allston street to the north street line of Warren street (side roads). Mexican asphalt (macadam base). Laid by Central Construction Company.		3,172	1917	May 21, 1923.
† Commonwealth avenue (Brighton)...	(Northerly roadway). East street line Kinross road to east street line Chestnut Hill avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.		3,693	1918	May 21, 1923.
† Commonwealth avenue (Brighton)...	Westerly street line Chestnut Hill avenue to Newton line (north road). Mexican asphalt (macadam base). Laid by Central Construction Company.		8,122	1917-18	May 21, 1923.
Concord square (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	41	1906	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Congress square (city proper).....	Congress street, across Congress square. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	201	388	1900	
Cooper street (city proper).....	North Margin street to east side of Endicott street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	163	504	1887	
Cooper street (city proper).....	East side of Endicott street to 10 feet east of Washington Street North. Mexican asphalt. Laid by Central Construction Company.	231	680	1917	
Corbet street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	46	184	1914	July 11, 1919.
Corcy street (Charlestown).....	124 feet north of Moulton street to Moulton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	124	289	1897	
Cornhill court (city proper).....	At Washington street. Pine wood block. Laid by James Doherty.....	9	8	1908	
Corning street (city proper).....	Washington street to 8 feet east of Shawmut avenue. Acme asphalt. Laid by Warren Brothers Company.	329	700	1908	
Cortes street (city proper).....	At Ferdinand street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	8	20	1911	
Court avenue (city proper).....	At Washington street. Mack brick block.....	7	8	1910	
Court street (city proper).....	Washington street to 9 feet west of Washington street. Pine wood block. Laid by James Doherty.	9	27	1908	
Court street (city proper).....	9 feet west of Washington street to Court square west. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	296	823	1904	
Court square (city proper).....	(East road) Court street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	8	14	1904	
Court square (city proper).....	(East road) 8 feet south of Court street to 20 feet north of Williams court. Acme asphalt. Laid by Warren Brothers Company.	263	800	1914	Mar. 21, 1919

Court square (city proper).....	(East road) 20 feet north of Williams court to south of Williams court. Acme asphalt. Laid by Warren Brothers Company.	37	118	1913
Court square (city proper).....	(South road) East road. Court square to West road, Court square. Acme asphalt. Laid by Warren Brothers Company.	74	181	1913
Court square (city proper).....	(West road) 291 feet south of Court street to 266 feet south of Court street. Acme asphalt. Laid by Warren Brothers Company.	25	65	1913
Court square (city proper).....	(West road) 266 feet south of Court street to 148 feet south of Court street. Acme asphalt. Laid by Warren Brothers Company.	118	305	1914 April 13, 1919.
Court square (city proper).....	(West road) 148 feet south of Court street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	140	346	1904
Cumberland street (city proper).....	At Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	4	17	1896
Cummings road (Brighton).....	114 feet west of Corey road to Commonwealth avenue. Mexican asphalt. Laid by Central Construction Company.	903	2,212	1917 Aug. 8, 1922.
Cunard street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	16	60	1906
Curtis street (East Boston).....	Bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by E. R. Taylor Company.	41	139	1906
Cushing avenue (Dorchester).....	At Columbia road. Topeka (macadam base). Laid by city force.	7	40	1918
Custer street (West Roxbury).....	At South street. Bitulithic. Laid by Warren Brothers Company.	1	3	1913
Custom House street (city proper).....	At India street. Mexican asphalt. Laid by Central Construction Company.	2	10	1917
D street (South Boston).....	8 feet north of West Fifth street to 2 feet north of Gold street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	134	500	1880
D street (South Boston).....	14 feet southwest of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company.	14	46	1917 Oct. 18, 1922.
D street (South Boston).....	Bessemer brick block gutters. Laid by Warren Brothers Company.		8	1917 Oct. 18, 1922.
D street (South Boston).....	West Broadway to 13 feet northeast of West Broadway. Acme asphalt. Laid by Warren Brothers Company.	13	48	1917 Oct. 18, 1922.
D street (South Boston).....	Bessemer brick block gutters. Laid by Warren Brothers Company.		3	1917 Oct. 18, 1922.

List of Streets Having a Smooth Pavement — Continued.

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Dacia street (Roxbury).....	2 feet north of Woodcliff street to 3 feet south of Dove street. Bitulithic. Laid by Warren Brothers Company.	294	850	1906	
Dakota street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	3	14	1913	
Danrell street (South Boston).....	Dorchester avenue to 5 feet west of Ames street. Mack brick block. Laid by Central Construction Company.	571	1,850	1910	
Dane street (West Roxbury).....	6 feet west of Holbrook street to Orchard street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	589	1,706	1915	Nov. 23, 1920.
Dartmouth street (city proper).....	Each side of Warren avenue. Pine wood block. Laid by Boston Paving Company.	8	30	1913	
Dartmouth street (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	16	1906	
Dartmouth street (city proper).....	Bridge over New York, New Haven & Hartford Railroad. Pine wood block. Laid by New York, New Haven & Hartford Railroad Company.	.....	397	1913	
Dartmouth street (city proper).....	Metropolitan brick block (in street car tracks). Laid by Boston Elevated Railway Company.	118	117	1901	
Dartmouth street (city proper).....	3 feet south of Stuart street to Huntington avenue. Bitulithic. Laid by James Doherty.	386	1,770	1912	
Dartmouth street (city proper).....	Huntington avenue to 83 feet south of Boylston street. Bitulithic. Laid by Coleman Brothers.....	.....	134	1914	Nov. 3, 1919
Dartmouth street (city proper).....	Acme asphalt. Laid by Warren Brothers Company.....	.....	496	1912	
Dartmouth street (city proper).....	Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	151	504	1901	
Dartmouth street (city proper).....	83 feet south of Boylston street to 15 feet south of Boylston street. Acme asphalt. Laid by Warren Brothers Company.....	.....	10	1912	Nov. 3, 1919.
Dartmouth street (city proper).....	Bitulithic. Laid by Coleman Brothers.....	68	473	1914	
Dartmouth street (city proper).....	Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	.....	67	1901	

Dartmouth street (city proper).....	15 feet south of Boylston street to Boylston street. Pine wood block. Laid by Coleman Brothers.	15	128	1914	Nov. 3, 1919
Dartmouth street (city proper).....	Boylston street to 15 feet north of Boylston street. Pine wood block. Laid by Coleman Brothers.	15	117	1914	Nov. 3, 1919.
Dartmouth street (city proper).....	15 feet north of Boylston street to north street line Public Alleys Nos. 439 and 440. Bitulithic. Laid by Coleman Brothers.	129	890	1914	Nov. 3, 1919.
Dartmouth street (city proper).....	North street line Public Alleys Nos. 439 and 440 to 4 feet south of Newbury street. Bitulithic. Laid by Warren Brothers Company.	120	938	1914	Oct. 24, 1919.
Dartmouth street (city proper).....	4 feet south of Newbury street to 9 feet south of south street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company.	296	2,303	1903	
Dartmouth street (city proper).....	9 feet south of south street line of Commonwealth avenue to 10 feet north of north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	219	1,636	1916	Nov. 22, 1921.
Dartmouth street (city proper).....	10 feet north of north street line of Commonwealth avenue to Beacon street. Bitulithic. Laid by Warren Brothers Company.	554	4,329	1903	
Davenport street (Roxbury).....	At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company.	26	66	1906-07	
Davis street (city proper).....	11 feet east of Washington street to 26 feet west of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	286	570	1892	
Davis street (city proper).....	26 feet west of Harrison avenue to Harrison avenue. Astec asphalt. Laid by Bermudes Company.	26	54	1918	
Day street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	5	36	1910	
Dearborn place (Roxbury).....	At Dearborn street. Acme asphalt. Laid by Warren Brothers Company.	5	8	1916	Nov. 20, 1922.
Dearborn street (Roxbury).....	Albany street to 56 feet south of Albany street. Mexican asphalt. Laid by Bermudes Company.	56	212	1918	
Dearborn street (Roxbury).....	56 feet south of Albany street to 27 feet north of Dudley street. Acme asphalt. Laid by Warren Brothers Company.	497	1,233	1916-17	Nov. 20, 1922.
	Bessemer brick block gutters. Laid by Warren Brothers Company.		220	1916-17	Nov. 20, 1922.
Dearborn street (Roxbury).....	27 feet north of Dudley street to Dudley street. Mack brick block. Laid by James Doherty.	27	176	1910	

List of Streets Having a Smooth Pavement — *(Continued).*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Decatur street (city proper).....	9 feet east of Washington street to 34 feet west of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	329	718	1892	
Decatur street (city proper).....	34 feet west of Harrison avenue to Harrison avenue. Astee asphalt. Laid by Bermudes Company.	34	49	1918	
Deerfield street (Roxbury).....	Commonwealth avenue to 18 feet north of Commonwealth avenue. Pine wood block. Laid by Clark & Gore.	18	94	1915	Sept. 2, 1920.
Derne street (city proper).....	Temple street to 5 feet east of Hancock street. Mack brick block. Laid by J. E. Burns & Co.	205	610	1909	
Derne street (city proper).....	5 feet east of Hancock street to Hancock street. Bitulithic. Laid by Warren Brothers Company.	5	30	1902	
Devonshire street (city proper).....	Dock square to 75 feet south of Dock square (west side). Pine wood block. Laid by Bernard E. Grant.	.....	44	1916	Dec. 14, 1921.
Devonshire street (city proper).....	75 feet south of Dock square to State street (each side of tracks). Pine wood block. Laid by Bernard E. Grant.	230	517	1916	Dec. 14, 1921.
Devonshire street (city proper).....	State street to 7 feet south of Water street. Pine wood block. Laid by Bernard E. Grant.	392	1,281	1916	Dec. 14, 1921.
Devonshire street (city proper).....	7 feet south of Water street to 7 feet north of Milk street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	248	743	1909	
Devonshire street (city proper).....	18 feet south of Milk street to 8 feet north of Franklin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	409	1,378	1905	
Devonshire street (city proper).....	9 feet north of Summer street to Summer street. Pine wood block. Laid by Northern Construction Company.	9	51	1915	Aug. 16, 1920.
DeWolf street (Dorchester).....	At Hancock street. Reseamer brick block. Laid by Fred S. & A. D. Gore Corporation.	8	24	1911	

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Dore street to 2 feet north of Hollis street. Bitulithic. Laid by James Doherty.	259	452	1914	Aug. 17, 1910
2 feet north of Hollis street to Hollis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	2	4	1891	
Lenox street to Sawyer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	204	295	1902	
Broad street to 135 feet west of Broad street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	135	270	1910	
135 feet west of Broad street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	174	350	1881	
At Callender street. Trinidad asphalt. Laid by D. M. Biggs & Co.	1	3	1915	Sept. 15, 1920.
118 feet south of Bellows place to 2 feet north of Richmond street. Pine wood block. Laid by James Doherty.	453	1,177	1917	Nov. 12, 1922.
West Broadway to 129 feet north of West Eighth street, minus intersections at West Fourth and West Fifth streets, and (west side) from 129 feet north of West Eighth street to West Eighth street. Bitulithic. Laid by Warren Brothers Company.	1,312	5,775	1905	
94 feet north of Vinton street to Vinton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	180	1904	
8 feet north of Rogers street to 154 feet north of Dorchester avenue. Bitulithic. Laid by Warren Brothers Company.	152	613	1914	Nov. 11, 1919.
Ralston street to 140 feet south of Ralston street. Pine wood block. Laid by Coleman Brothers.	140	402	1913	
9 feet west of Washington street to 8 feet east of Tremont street. Bitulithic. Laid by Warren Brothers Company.	437	775	1914	Nov. 7, 1919.
3 feet east of Tremont street to Tremont street. Pine wood block. Laid by Bernard E. Grant.	3	6	1917	Nov. 15, 1922.
At Treadway road. Aztec asphalt. Laid by Central Construction Company,	7	21	1916	Nov. 17, 1921.
At Blue Hill avenue. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	3	9	1917	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Dove street (Roxbury).....	At Decia street. Bitulithic. Laid by Warren Brothers Company.....	1	3	1906	
Downing street (Roxbury).....	Whittier street to Vernon street. Mack brick block. Laid by J. E. Burns & Co.	323	750	1909	
Dudley street (Roxbury).....	70 feet west of Guild row to 24 feet east of Harrison avenue. Fine wood block. Laid by James Doherty.	841	4,134	1912	
Dudley street (Roxbury).....	24 feet east of Harrison avenue to 4 feet east of Magazine street. Mack brick block. Laid by James Doherty.	2,666	10,755	1910	
Dudley street (Roxbury).....	Dunmore street to Magazine street (east side). Sicilian rock asphalt. Laid by Boston Asphalt Company.	.....	350	1902	
Dunbar avenue (Dorchester).....	At Washington street. Topoka (macadam base). Laid by Warren Brothers Company.	10	40	1918	Sept. 25, 1923.
Dundee street (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	4	13	1901	
Dunlap street (Dorchester).....	Washington street to 11 feet west of Washington street. Fine wood block. Laid by William J. Barry.	11	25	1913	
Dunlap street (Dorchester).....	11 feet west of Washington street to 6 feet east of Whitfield street. Trin- idad asphalt. Laid by William J. Rafferty & Co.	787	1,759	1915	Dec. 28, 1920.
Dunmore street (Roxbury).....	Dudley street to 57 feet east of Dudley street. Mack brick block. Laid by James Doherty.	57	135	1910	
Dunster road (West Roxbury).....	2 feet north of Centre street to 7 feet south of Dane street. Mexican asphalt. Laid by Central Construction Company.	854	2,468	1917	June 12, 1922.
Dunster road (West Roxbury).....	7 feet south of Dane street to Dane street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	7	23	1915	Nov. 23, 1920.
Dunster road (West Roxbury).....	Dane street to 7 feet north of Dane street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	7	26	1915	Nov. 23, 1920.

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List of Streets Having a Smooth Pavement — *Continued.*

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Elgin street (West Roxbury).....	Centre street to West Roxbury Branch, Boston & Providence Division, New York, New Haven & Hartford Railroad. Trinidad asphalt. Laid by Charles J. Jacobs Company.	596	1,722	1915	Dec. 2, 1920.
Eliot street (city proper).....	On south side at Broadway. Pine wood block. Laid by Coleman Brothers.....		99	1914	
Eliot street (city proper).....	East side of Broadway to Columbus avenue. Pine wood block. Laid by United States Wood Preserving Company.	164	723	1907	
Eliot street (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	7	1913	
Elizabeth street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....	8	25	1918	Nov. 4, 1923.
Elm Hill avenue (Roxbury).....	At Seaver street. Acne asphalt (macadam base). Laid by Warren Brothers Company.	19	83	1917	Sept. 17, 1922.
Emerald street (city proper).....	7 feet south of Castle street to 7 feet north of Dover street. Bitulithic. Laid by Warren Brothers Company.	898	2,599	1904	
Endicott street (city proper).....	Cooper street, across Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	320	1,082	1899	
Epping street (Dorchester).....	Washington street to 1 foot east of Norfolk street. Mexican asphalt. Laid by Central Construction Company.	240	557	1917	May 25, 1922.
Epping street (Dorchester).....	1 foot east of Norfolk street to Norfolk street. Bitulithic. Laid by James Doherty.	1	6	1913	June 11, 1919.
Essex place (city proper).....	Tufta street to 7 feet south of Essex street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	195	336	1901	
Essex street (Brighton).....	Commonwealth avenue to 22 feet north of Commonwealth avenue. Pine wood block. Laid by Clark & Gore.	22	161	1915	Sept. 2, 1926.
Essex street (Brighton).....	From 22 feet north of Commonwealth avenue to bridge abutment. Aztec asphalt. Laid by Bermudez Company.	240	679	1918	

Essex street (Brighton).....	Bridge abutment to Cambridge line. Pine wood block. Laid by James Doherty.	520	1,445	1913	
Etna street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company..	10	35	1918	Dec. 24, 1923.
Euclid street (Dorchester).....	At Washington street. Topoka (macadam base). Laid by Warren Brothers Company.	10	33	1918	Sept. 25, 1923.
Eustis street (Roxbury).....	138 feet east of Winlow street to 163 feet west of Albany street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	130	241	1906	
Eustis street (Roxbury).....	12 feet west of Dearborn street to Dearborn street. Acme asphalt. Laid by Warren Brothers Company.	12 {	29	1916	Nov. 20, 1922.
Eustis street (Roxbury).....	Beesmer brick block gutters. Laid by Warren Brothers Company.	7	7	1916	Nov. 20, 1922.
Eustis street (Roxbury).....	Dearborn street to 6 feet east of Dearborn street. Acme asphalt. Laid by Warren Brothers Company.	6 {	16	1916	Nov. 20, 1922.
Eustis street (Roxbury).....	Beesmer brick block gutters. Laid by Warren Brothers Company.	4	4	1916	Nov. 20, 1922.
Eustis street (Roxbury).....	6 feet east of Dearborn street to 9 feet west of Hampden street. Bitulithic. Laid by John F. Beatty.	1,270	3,689	1914	Sept. 4, 1919.
Eustis street (Roxbury).....	Hampden street to Magazine street. Bitulithic. Laid by John F. Beatty.	686	1,990	1914	Sept. 4, 1919.
Evelyn street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.	8	25	1918	Nov. 4, 1923.
Everett street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company..	10	31	1918	Dec. 24, 1923.
Everson street (Dorchester).....	Olney street to Geneva avenue. Topoka. Laid by Central Construction Company.	677	2,026	1916	June 26, 1922.
Exchange place (city proper).....	8 feet east of Congress street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	237	685	1903	
Exchange street (city proper).....	173 feet north of State street to 25 feet south of Dock square. Pine wood block. Laid by Central Construction Company.	139	242	1913	
Exeter place (city proper).....	8 feet west of Chauncy street to 7 feet east of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	155	353	1897	
Exeter street (city proper).....	At Huntington avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.		14	1912	
	Bitulithic. Laid by Warren Brothers Company.		5	1909	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Exeter street (city proper).....	Huntington avenue to 16 feet south of Boylston street. Bitulithic. Laid by Boston Elevated Railway Company.	541	2,126	1914	Nov., 1919.
Exeter street (city proper).....	16 feet south of Boylston street to Boylston street. Bitulithic. Laid by Coleman Brothers.	16	85	1914	Nov. 3, 1919.
Exeter street (city proper).....	Boylston street to 15 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers.	15	60	1914	Nov. 3, 1919.
Exeter street (city proper).....	South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	200	730	1916	Nov. 22, 1921.
Exeter street (city proper).....	South side of Marlborough street. Bitulithic. Laid by James Doherty.....	3	13	1914	Aug. 3, 1919.
Exeter street (city proper).....	North side of Marlborough street. Bitulithic. Laid by James Doherty.....	2	9	1914	Aug. 3, 1919.
Exeter street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	2	9	1909	
Fabin street (city proper).....	Newland street to Ivanhoe street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	415	606	1895	
Fabyan street (Dorchester).....	15 feet east of Blue Hill avenue to Harvard street. Trinidad asphalt. Laid by Martino DeMatteo.	601	1,906	1915	May 29, 1920.
Fairfield street (city proper).....	At Boylston street. Bitulithic. Laid by Warren Brothers Company.....	5	23	1913	
Fairfield street (city proper).....	Each side at Marlborough street. Bitulithic. Laid by James Doherty.....	6	26	1914	Aug. 3, 1919.
Fairfield street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	3	12	1909	
Falmouth street (Roxbury).....	30 feet north of Norway street to 6 feet north of Massachusetts avenue. Pine wood block. Laid by James Doherty.	634	2,433	1909	

Falmouth street (Roxbury).....	6 feet north of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	6	25	1901	
Farrington avenue (Brighton).....	At Harvard avenue. Bitulithic. Laid by Coleman Brothers.....	2	6	1914	AUG. 7, 1919.
Fay street (city proper).....	5 feet west of Harrison avenue to 8 feet south of Dover street (cobble base). Sicilian rock asphalt. Laid by Boston Asphalt Company.	305	532	1894	
Fayette street (city proper).....	Broadway to 7 feet west of Broadway. Pine wood block. Laid by Coleman Brothers.	7	16	1913	
Fayette street (city proper).....	7 feet west of Broadway to Ferdinand street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	839	1,914	1911	
Fenelon street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	30	1912	
Ferdinand street (city proper).....	See Arlington square.				
Ferdinand street (city proper).....	16 feet north of Boston & Albany Railroad Bridge to 50 feet north of Isabella street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	376	1,069	1911	
Fernboro street (Dorchester).....	Lawrence avenue to Intervale street. Trinidad asphalt. Laid by James Doherty.	487	1,412	1916	June 28, 1921.
Flint street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....	8	25	1918	Nov. 4, 1923.
Florence street (city proper).....	10 feet east of Washington street to 8 feet west of Harrison avenue. Mexican asphalt. Laid by Central Construction Company.	341	604	1917	
Ford street (East Boston).....	Saratoga street to 62 feet north of Saratoga street. Standard asphalt. Laid by Bermudez Company.	62	271	1918	Unfinished.
Fordham road (Brighton).....	Brighton avenue to Commonwealth avenue. Mexican asphalt. Laid by Central Construction Company.	624	1,481	1917	July 2, 1922.
Foster street (Brighton).....	At Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company.	3	10	1918	May 21, 1923.
Franklin street (city proper).....	At India street. Mexican asphalt. Laid by Central Construction Company.	1	4	1901	
Fruit street (city proper).....	Blossom street to Charles street. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.	949 {	1,435 503	1917 1917	Nov. 15, 1922. Nov. 15, 1922.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Warranty Expires.
Exeter street (city proper).....	Huntington avenue to 16 feet south of Boylston street. Bitulithic. Laid by Boston Elevated Railway Company.	541	2,126	1914	Nov., 1919.
Exeter street (city proper).....	16 feet south of Boylston street to Boylston street. Bitulithic. Laid by Coleman Brothers.	16	85	1914	Nov. 3, 1919.
Exeter street (city proper).....	Boylston street to 15 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers.	15	60	1914	Nov. 3, 1919.
Exeter street (city proper).....	South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company.	200	730	1916	Nov. 22, 1921.
Exeter street (city proper).....	South side of Marlborough street. Bitulithic. Laid by James Doherty.....	3	13	1914	Aug. 3, 1919.
Exeter street (city proper).....	North side of Marlborough street. Bitulithic. Laid by James Doherty.....	2	9	1914	Aug. 3, 1919.
Exeter street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	2	9	1909	
Fabin street (city proper).....	Newland street to Ivanhoe street. Sielian rock asphalt. Laid by Boston Asphalt Company.	415	606	1895	
Fabyan street (Dorchester).....	15 feet east of Blue Hill avenue to Harvard street. Trinidad asphalt. Laid by Martino DeMatteo.	691	1,906	1915	May 29, 1920.
Fairfield street (city proper).....	At Boylston street. Bitulithic. Laid by Warren Brothers Company.....	5	23	1913	
Fairfield street (city proper).....	Each side at Marlborough street. Bitulithic. Laid by James Doherty.....	6	26	1914	Aug. 3, 1919.
Fairfield street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	3	12	1909	
Falmouth street (Roxbury).....	30 feet north of Norway street to 6 feet north of Massachusetts avenue. Fine wood block. Laid by James Doherty.	634	2,433	1909	

Falmouth street (Roxbury).....	6 feet north of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	6	25	1901	
Farrington avenue (Brighton).....	At Harvard avenue. Bitulithic. Laid by Coleman Brothers.....	2	6	1914	Aug. 7, 1919.
Fay street (city proper).....	5 feet west of Harrison avenue to 8 feet south of Dover street (cobble base). Sicilian rock asphalt. Laid by Boston Asphalt Company.	305	532	1894	
Fayette street (city proper).....	Broadway to 7 feet west of Broadway. Pine wood block. Laid by Coleman Brothers.	7	16	1913	
Fayette street (city proper).....	7 feet west of Broadway to Ferdinand street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	839	1,914	1911	
Fenelon street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	30	1912	
Ferdinand street (city proper).....	See Arlington square.				
Ferdinand street (city proper).....	16 feet north of Boston & Albany Railroad Bridge to 50 feet north of Isabella street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	376	1,069	1911	
Fernboro street (Dorchester).....	Lawrence avenue to Intervale street. Trinidad asphalt. Laid by James Doherty.	487	1,412	1916	June 28, 1921.
Flint street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....	8	25	1918	Nov. 4, 1923.
Florence street (city proper).....	10 feet east of Washington street to 8 feet west of Harrison avenue. Mexican asphalt. Laid by Central Construction Company.	341	694	1917	
Ford street (East Boston).....	Saratoga street to 62 feet north of Saratoga street. Standard asphalt. Laid by Bermudes Company.	62	271	1918	Unfinished.
Fordham road (Brighton).....	Brighton avenue to Commonwealth avenue. Mexican asphalt. Laid by Central Construction Company.	624	1,481	1917	July 2, 1922.
Foster street (Brighton).....	At Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company.	3	10	1918	May 21, 1923.
Franklin street (city proper).....	At India street. Mexican asphalt. Laid by Central Construction Company.	1	4	1901	
Fruit street (city proper).....	Blossom street to Charles street. Pine asphalt. Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	949 {	1,435 503	1917 1917	Nov. 15, 1922. Nov. 15, 1922.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
G street (South Boston).....	110 feet north of East Sixth street to 178 feet north of East Seventh street. Bitulithic. Laid by Warren Brothers Company.	230	828	1905	
Gaffney street (Brighton).....	Commonwealth avenue to Boston & Albany Railroad. Mexican asphalt. Laid by Central Construction Company. Pine wood block (brows to street car rails). Laid by Central Construction Company.	779	3,914	1917	June 29, 1922.
Gainsborough street (Roxbury).....	10 feet east of Huntington avenue to Providence Division of New York, New Haven & Hartford Railroad. Bitulithic. Laid by Warren Brothers Company.	539	2,087	1903	June 29, 1922.
Garden Court street (city proper).....	North square to 7 feet south of Fleet street. Bitulithic. Laid by Warren Brothers Company.	226	365	1906	
Gardner street (Brighton).....	At Harvard avenue. Bitulithic. Laid by Coleman Brothers.....	2	6	1914	Aug. 7, 1919.
Garrison street (city proper).....	At Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	4	16	1896	
Gates street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	5	16	1905	
Gay street (Roxbury).....	At Linden Park street. Mack brick block. Laid by J. E. Burns & Co.....	8	19	1909	
Gaylord street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	3	9	1913	
Genesee street (city proper).....	Harrison avenue to 15 feet east of Harrison avenue. Artec asphalt. Laid by Bermudes Company.	15	34	1918	
Genesee street (city proper).....	15 feet east of Harrison avenue to 2 feet west of Albany street. Seyssel rock asphalt. Laid by Jones & Meehan.	488	1,064	1899	
Geneva avenue (Dorchester).....	185 feet west of Beechwood street to 10 feet east of Bowdoin street. Mack brick block. Laid by Central Construction Company.	1,329	5,123	1911	
Glenarm street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	23	1912	

		1	3	1918	Dec. 24, 1923
Glencoe street (Brighton).....	North Beacon street to 1 foot south of North Beacon street. Bitulithic. Laid by Warren Brothers Company.				
Glencoe street (Brighton).....	1 foot south of North Beacon street to Saybrook street. Mexican asphalt. Laid by Central Construction Company.	415	972	1917	Aug. 2, 1922.
Glencoe street (Brighton).....	Saybrook street to 7 feet south of Garden street. Mexican asphalt. Laid by Central Construction Company.	346	820	1917	Aug. 2, 1922.
Glendale street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	23	1910-11	
Glendower road (West Roxbury).....	Kittredge street to Poplar street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	1,926	5,578	1915-16	July 14, 1921.
Glenville avenue (Brighton).....	At Harvard avenue. Bitulithic. Laid by Coleman Brothers.....	2	6	1914	Aug. 7, 1919.
Gloucester street (city proper).....	At Boylston street. Bitulithic. Laid by Warren Brothers Company.....	5	23	1913	
Gloucester street (city proper).....	Each side of Newbury street. Fine wood block. Laid by United States Wood Preserving Company.	7	31	1901	
Gloucester street (city proper).....	Each side of Marlborough street. Bitulithic. Laid by James Doherty.....	6	26	1914	Aug. 3, 1919.
Gloucester street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barbor Asphalt Paving Company.	3	13	1909	
Gold street (South Boston).....	Bridge over New York, New Haven & Hartford Railroad. Fine wood block. Laid by Central Construction Company.	82	118	1918	
Gold street (South Boston).....	B street to C street. Sicilian rock asphalt. Laid by Jones & Meehan.....	512	730	1901	
Gold street (South Boston).....	C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan.....	513	741	1901	
Gold street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	4	6	1905	
Gordon street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company.	10	31	1918	Dec. 24, 1923.
Grove street (East Boston).....	8 feet east of Venice street to Cottage street. Topoka. Laid by Warren Brothers Company.	424	1,430	1917-18	April 26, 1923.
Grace street (Dorchester).....	Walton street to Roslin street. Bitulithic. Laid by D. M. Biggs & Co.....	303	873	1915	Aug. 19, 1920.
Granby street (Roxbury).....	At Commonwealth avenue. Fine wood block. Laid by Clark & Gore.....	19	88	1915	Sept. 2, 1920.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Gray street (city proper)	At Clarendon street. Bitulithic. Laid by Warren Brothers Company.....	3	7	1914	Sept. 25, 1919.
Greenough avenue (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	18	1913	
Greenville street (Roxbury).....	At Dudley street. Mack brick block. Laid by James Doherty.....	8	20	1910	
Greenwich park (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906	
Groton street (city proper)	Washington street to Shawmut avenue (block base). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	316	528	1892	
Guild row (Roxbury)	42 feet north of Dudley street to Dudley street. Pine wood block. Laid by James Doherty.	42	257	1912	
Half Moon street (Dorchester).....	At Lingard street. Bitulithic. Laid by James Doherty	1	8	1915	Sept. 17, 1920.
Hall street (West Roxbury).....	At South street. Aztec asphalt (macadam base). Laid by Bermudez Company.	2	6	1918	Sept. 28, 1923.
Halleck street (Roxbury).....	At Station street. Bitulithic. Laid by John F. Beatty.....	1	3	1914	Dec. 18, 1919.
Hamburg street (city proper)	Mythic street to Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	375	585	1896	
Hamlet street (Dorchester)	Balden street to Columbia road. Trinidad asphalt. Laid by Central Construction Company.	409	909	1915	July 22, 1920.
Hammond street (city proper).....	Shawmut avenue to Tremont street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	1,115	4,214	1912	
Hampshire street (Roxbury).....	Ruggles street to Whittier street. Mack brick block. Laid by J. E. Burns & Co.	362	1,050	1909	
Hampshire street (Roxbury).....	Whittier street to Vernon street. Mack brick block. Laid by J. E. Burns & Co.	364	1,055	1909	

Hampshire street (Roxbury).....	Vernon street to Linden Park street. Mack brick block. Laid by J. E. Burns & Co.	645	1,864	1909
Hancock street (city proper).....	Mt. Vernon street to 4 feet north of Mt. Vernon street. Mack brick block..	4	14	1901
Hancock street (city proper).....	4 feet north of Mt. Vernon street to 7 feet south of Cambridge street. Bitulithic. Laid by Warren Brothers Company.	928	2,383	1902
Hancock street (Dorchester).....	At Columbia road (west road). Bitulithic (macadam base). Laid by Warren Brothers Company.	.....	281	1915
Hancock street (Dorchester).....	Columbia road to 345 feet northwest of DeWolf street (not including next item). Mack brick block. Laid by Central Construction Company.	2,199	9,189	1910-11
Hancock street (Dorchester).....	(East side) 73 feet north of Howe street to 88 feet north of Cameron street. Concrete road. Laid by city force.	.....	408	1918
Hancock street (Dorchester).....	At Bowdoin street. Mack brick block. Laid by Central Construction Com- pany.	.....	205	1913
Hancock street (Dorchester).....	345 feet northwest of DeWolf street to 19 feet west of Dorchester avenue. Bessemer brick block. Laid by Fred S. & A. D. Gore Corporation.	1,416	5,684	1911
Hanover avenue (city proper).....	Hanover street to 7 feet west of North street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company.	300	256	1892
Hanover street (city proper).....	(West side) Tileston street, across Charter street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	315	425	1907
Hanover street (city proper).....	(East side) Tileston street, across Charter street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	.....	323	1896
Harold street (Roxbury).....	At Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company.	20	93	1917
Harris avenue (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	5	1913
Harris street (city proper).....	Hanover street to 10 feet east of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	10	11	1896
Harris street (city proper).....	10 feet east of Hanover street to 9 feet west of North street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	281	352	1904
				Sept. 17, 1922.

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Harrison avenue (city proper).....	22 feet south of Kneeland street to 22 feet north of Harvard street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	249	385	1899	
Harrison avenue (city proper).....	Bridge over Boston & Albany Railroad. Pine wood block. Laid by Central Construction Company. Maintained by railroad company.	53	177	1915	
Harrison avenue (city proper).....	Asylum street, across Davis street. Artzec asphalt. Laid by Bermudez Company.	160	302	1918	
Harrison avenue (city proper).....	Northerly side of Decatur street, across Gloucester place. Artzec asphalt. Laid by Bermudez Company.	144	269	1918	
Harrison avenue (city proper).....	Brow to track at Union Park street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	.....	12	1913	
Harrison avenue (city proper).....	At Union Park street. Acme asphalt. Laid by Fred S. & A. D. Gore Corporation.	.....	140	1913	
Harrison avenue (city proper).....	North side of Union Park street, across Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	248	433	1902-03	
Harrison avenue (city proper).....	Malden street to East Dedham street. Acme asphalt. Laid by Warren Brothers Company.	382	918	1909	
Harrison avenue (city proper).....	East Newton street to 6 feet north of East Springfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	922 {	948 1,716	1888 1895	
Harrison avenue (city proper).....	7 feet south of East Springfield street to 104 feet south of East Springfield street (east side). Trinidad asphalt. Laid by Barber Asphalt Paving Company.			1888	
Harrison avenue (city proper).....	6 feet north of East Springfield street to Northampton street, not including 7 feet south of East Springfield street to 104 feet south of East Springfield street (east side). Bitulithic. Laid by Warren Brothers Company.	508	1,174	1905	
Harrison avenue (city proper).....	Northampton street to East Lenox street. Sielian rock asphalt. Laid by Boston Asphalt Company.	427	1,090	1903	

Harrison avenue (Roxbury).....	At Dudley street. Pine wood block. Laid by James Doherty.....	16	72	1912
Harvard avenue (Brighton).....	19 feet south of Cambridge street to Brighton avenue. Bitulithic. Laid by Coleman Brothers.....	843	2,594 887	1914 } 1914 } Aug. 7, 1919.
Harvard avenue (Brighton).....	Pine wood block (between tracks and brows to tracks). Laid by Coleman Brothers. Brighton avenue to north street line of Commonwealth avenue. Bitulithic. Laid by Coleman Brothers.....	884	3,311 600	1914 } 1914 } Aug. 7, 1919.
Harvard avenue (Brighton).....	Pine wood block (between tracks and brows to tracks). Laid by Coleman Brothers. North side of Commonwealth avenue to south side of Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company.	180	635	1917-18 May 21, 1923.
Harvard avenue (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	16	90	1912
Harvard Bridge (city proper).....	Boston side of draw to 270 feet west of southerly abutment. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	708	3,994	1913
Harvard Bridge (city proper).....	270 feet west of southerly abutment to southerly abutment. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	270	1,080	1912-13
Harvard Bridge (city proper).....	Boston side of draw to south abutment. Mack brick block (each side of rails). Laid by Fred S. & A. D. Gore Corporation.	.....	467	1912-13
Harvard square (Charlestown).....	At Harvard street. Artec asphalt (macadam base). Laid by Bermudez Company.	15	46	1918 June 8, 1923.
Harvard street (Charlestown).....	4 feet south of Harvard square to 5 feet south of Devens street. Artec asphalt (macadam base). Laid by Bermudez Company.	446	1,276	1918 June 8, 1923.
Harvard street (city proper).....	Washington street 9 feet west of Harrison avenue. Pine wood block. Laid by J. H. McCarthy.	401	944	1910
Harvard street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	76	1912
Harwood street (Dorchester).....	Willowood street to Lucerne street. Trinidad asphalt. Laid by James Doherty.	723	2,112	1916 Dec. 3, 1921.
Haskins street (Roxbury).....	Ruggles street to 6 feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	6	14	1907

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Haskins street (Roxbury).....	6 feet north of Vernon street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	6	13	1907	
Haviland street (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	5	14	1901	
Hawes street (city proper).....	9 feet east of Congress street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	249	246	1904	
Hawley street (city proper).....	At Summer street. Pine wood block. Laid by Northern Construction Company.	8	25	1915	Aug. 16, 1920.
Hayward place (city proper).....	Washington street to 9 feet east of Washington street. Black gum wood block. Laid by United States Wood Preserving Company.	9	20	1906	
Hayward place (city proper).....	9 feet east of Washington street to Harrison avenue. Acme asphalt. Laid by Boston Paving Company.	251	565	1913	
Heath street (Roxbury).....	Parker street to 7 feet north of Lawn street and from 72 feet north of Lawn street to 86 feet south of South Huntington avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	3,045	12,627	1910	
Helen street (Dorchester).....	7 feet west of Bernard street to 17 feet east of Talbot avenue. Trinidad asphalt. Laid by James Doherty.	331	1,003	1915	Nov. 2, 1920.
Helen street (Dorchester).....	15 feet east of Talbot avenue to Talbot avenue. Mack brick block. Laid by James Doherty.	15	93	1911	
Hemenway street (Roxbury).....	At Boylston street. Bitulithic. Laid by Warren Brothers Company.....	5	25	1905	
Henry street (Dorchester).....	At Bowdoin street. Topeka (macadam base). Laid by city force.....	20	104	1918	
Henry street (East Boston).....	At Maverick square. Aztec asphalt. Laid by Bermudez Company.....	10	34	1917	Dec. 15, 1922.
Henshaw street (Brighton).....	At Cambridge street. Bitulithic. Laid by Warren Brothers Company.....	25	274	1913	
Hereford street (city proper).....	Each side of Newbury street. Pine wood block. Laid by Patrick McGovern,	7	31	1903	

Hereford street (city proper).....	Each side of Marlborough street. Bitulithic. Laid by James Doherty.....	6	28	1914	Aug. 3, 1919.
Hereford street (city proper).....	At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	3	12	1907	
Herrick street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company....	10	28	1918	Dec. 24, 1923.
Highborn street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company....	10	28	1918	Dec. 24, 1923.
High street (Dorchester).....	At Hancock street. Resesmer brick block. Laid by Fred S. & A. D. Gore Corporation.	8	29	1911	
Hillcrest street (West Roxbury).....	Elgin street to 7 feet south of Elgin street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	7	23	1915	Dec. 2, 1920.
Hillcrest street (West Roxbury).....	7 feet south of Elgin street to Temple street. Mexican asphalt. Laid by Central Construction Company.	518	1,507	1917	June 25, 1922.
Hinsdale street (Roxbury).....	Commonwealth avenue to 8 feet south of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	8	28	1917	May 21, 1923.
Hinsdale street (Roxbury).....	8 feet south of Commonwealth avenue to Cummington street. Mack brick block. Laid by Fred S. & A. D. Gore Corporation.	226	856	1911	
Hollis street (city proper).....	Tremont street to 1 foot east of Tremont street. Pine wood block. Laid by Bernard E. Grant.	1	3	1917	Nov. 15, 1922.
Hollis street (city proper).....	7 feet east of Tremont street toward Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	254	478	1891	
Holyoke street (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07	
Homestead street (Roxbury).....	Elm Hill avenue to Humboldt avenue. Mexican asphalt. Laid by Central Construction Company.	1,123	3,253	1917	July 18, 1922.
Hopestill street (Dorchester).....	3 feet south of Aspinwall road to 8 feet south of Aspinwall road. Barrington brick block. Laid by Charles J. Jacobs Company.	5	14	1907	
Hopestill street (Dorchester).....	10 feet south of Aspinwall road to 6 feet north of Southern avenue. Trinidad asphalt. Laid by Charles J. Jacobs Company.	302	872	1915	May 29, 1920.
Howe street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	29	1910	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Howland street (Roxbury).....	231 feet west of Humboldt avenue to 6 feet east of Harold street. Bitu- lithic. Laid by John F. Beatty.	422	1,219	1916	July 19, 1920.
Hubert street (Roxbury).....	Shawmut avenue to Westminster street. Astec asphalt. Laid by Central Construction Company.	447	1,292	1916	Aug. 18, 1921.
Hudson street (city proper).....	7 feet south of Beach street to 7 feet north of Kneeland street. Mexican asphalt. Laid by Central Construction Company.	308	816	1917	
Hudson street (city proper).....	7 feet south of Kneeland street to 6 feet north of Harvard street. Mexican asphalt. Laid by Central Construction Company.	358	955	1917	
Hudson street (city proper).....	6 feet south of Harvard street to 82 feet north of Curve street. Mexican asphalt. Laid by Central Construction Company.	822	2,192	1917	
Humboldt avenue (Roxbury).....	At Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company.	21	90	1917	Sept. 17, 1922.
Hunnewell avenue (Brighton).....	At Atkins street. Mexican asphalt. Laid by Central Construction Com- pany.	7	18	1917	July 18, 1922.
Huntington avenue (city proper).....	At Boylston street (east side). Bitulithic. Laid by Coleman Brothers.		444	1914	Nov. 3, 1919.
	Trinidad asphalt. Laid by Bar-er Asphalt Paving Company.		302	1901	
Huntington avenue (city proper).....	Boylston street to 169 feet south of Boylston street (west side). Pine wood block. Laid by Coleman Brothers.	189	786	1914	Nov. 3, 1919.
Huntington avenue (city proper).....	At St. James avenue. Bitulithic. Laid by James Doherty.	100	578	1912	
Huntington avenue (city proper).....	At St. James avenue and Dartmouth street. Bitulithic. Laid by Boston Elevated Railway Company.	40	328	1914	Nov., 1919.
Huntington avenue (city proper).....	At Dartmouth street. Acme asphalt. Laid by Warren Brothers Company.		180	1912	

			1901 1914	Nov., 1919.
Huntington avenue (city proper).....	159 feet south of Boylston street to 9 feet south of Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.....	325 {	2,570 177	
Huntington avenue (city proper).....	9 feet south of Dartmouth street to 84 feet north of bridge over Boston & Albany Railroad. Bitulithic. Laid by Warren Brothers Company.	600	3,350	1906
Huntington avenue (city proper).....	84 feet north of bridge over Boston & Albany Railroad to bridge over Boston & Albany Railroad. Bitulithic. Laid by Warren Brothers Company.	84	480	1909
Huntington avenue (city proper).....	At Exeter street. Bitulithic. Laid by Boston Elevated Railway Company.	.....	101	1914
Huntington avenue (city proper).....	Bridge over Boston & Albany Railroad. Pine wood block. Laid by Central Construction Company.	92	633	1916
Huntington avenue (city proper).....	Bridge over Boston & Albany Railroad to 70 feet south of bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by Simpson Brothers Corporation.	70	424	1909
Huntington avenue (city proper).....	70 feet south of bridge over Boston & Albany Railroad to north side of Cum- berland street, minus 685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company.	1,520	6,635	1896
Huntington avenue (city proper).....	685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	1,831	1907
Huntington avenue (Roxbury).....	North side of Cumberland street to 10 feet north of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	737	4,083	1896
Huntington avenue (Roxbury).....	9 feet south of Massachusetts avenue to 8 feet north of Galinborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	570	3,155	1896
I street (South Boston).....	East Broadway to East Fourth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	252	952	1910
Idlewild street (Brighton).....	Commonwealth avenue to 17 feet south of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	17	38	1917
Idlewild street (Brighton).....	17 feet south of Commonwealth avenue to 7 feet north of Brainerd road. Bitulithic. Laid by Charles J. Jacobs Company.	362	1,046	1915
				May 21, 1923.
				Sept. 3, 1920.

List of Streets Having a Smooth Pavement — *Continued.*

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
India street (city proper).....	9 feet east of Milk street to angle near Export street. Mexican asphalt. Laid by Central Construction Company.	553	2,123	1917	
Intervale street (Dorchester).....	Each side of Normandy street. Artex asphalt. Laid by Central Construction Company.	2	7	1916	Oct. 13, 1921.
Ipwich street (Roxbury).....	Bridge over waterway. Sicilian rock asphalt. Laid by Boston Asphalt Company.	61	267	1898	
Irvington street (city proper).....	At Huntington avenue. Trinidad asphalt. Laid by Simpson Brothers Corporation.	5	20	1909	
Isabella street (city proper).....	At Ferdinand street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	8	20	1911	
Jerome street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	42	1911	
Joiner street (Charlestown).....	Park street to Chelsea street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	161	413	1906	
Jones avenue (Dorchester).....	Masoot street to Ballou avenue. Trinidad asphalt. Laid by James Doherty.	984	2,855	1916	June 13, 1921.
Joy street (city proper).....	Beacon street to 12 feet north of Beacon street. Topoka (macadam base). Laid by Bernard E. Grant.	12	28	1917	Nov. 15, 1922.
Justin road (Brighton).....	At Atkins street. Mexican asphalt. Laid by Central Construction Company.	7	18	1917	July 18, 1922.
K street (South Boston).....	East Fourth street to East Sixth street. American rock asphalt. Laid by Jones & Meehan.	600	2,113	1906	
K street (South Boston).....	East Sixth street to East Eighth street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	566	1,083	1896	
Kennard avenue (city proper).....	At Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1	3	1887	

			2	4	1917	1915	1910, 1920.
Kennard avenue (city proper).....	At Allen street. Mexican asphalt. Laid by Central Construction Company, James Doherty.		503	1,113			Nov. 10, 1920.
Kenney street (Roxbury).....	Day street to 503 feet west of Day street. Trinidad asphalt. Laid by James Doherty.						
Kent street (Roxbury).....	Roxbury street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	440	933	1911			
Kenwood street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	30	1913			
Kerwin street (Dorchester).....	At Talbot avenue (crosswalk) Barrington brick block. Laid by James Doherty.....	9	51	1907			
	Mack brick block. Laid by James Doherty.....	5	37	1911			
Keyes street (West Roxbury).....	At South street. Aztec asphalt (macadam base). Laid by Bermudez Company.	3	11	1918			Sept. 28, 1923.
Kilby street (city proper).....	Milk street to 6 feet north of Milk street. Pine wood block. Laid by James Doherty.	6	70	1910			
Kilby street (city proper).....	6 feet north of Milk street to 56 feet south of Water street (west side). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	1,292	1898			
Kilby street (city proper).....	6 feet north of Milk street, across Central street (east side). American rock asphalt. Laid by Jones & Meelian.	394	1,520	1908			
Kilby street (city proper).....	At Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	.....	505	1881			
Kilby street (city proper).....	Central street to State street. Trinidad asphalt. Laid by Central Construction Company.	240	672	1915			
Kingston street (city proper).....	Summer street to 6 feet south of Summer street. Pine wood block. Laid by Northern Construction Company.	6	18	1915			Aug. 16, 1920.
Kingston street (city proper).....	6 feet south of Essex street to 7 feet north of Beach street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	479	1,828	1910			
Kirkland street (city proper).....	10 feet south of Broadway toward Corning street. Acme asphalt. Laid by Warren Brothers Company.	361	519	1909			
Kittredge street (West Roxbury).....	Cornell street to Beech street. Bitulithic. Laid by Charles J. Jacobs Company.	547	1,588	1916			July 6, 1921.

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Laconia street (city proper).....	Washington street to Harrison avenue. Mexican asphalt. Laid by Central Construction Company.	314	687	1917	
La Grange street (city proper).....	Tremont street to 10 feet east of Tremont street. Pine wood block. Laid by Bernard E. Grant.	10	20	1917	Nov. 15, 1922.
La Grange street (city proper).....	10 feet east of Tremont street to 303 feet west of Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	171	335	1897	
Lake street (Brighton).....	At Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company.	10	81	1918	May 21, 1923.
Lamont street (Roxbury).....	At Linden Park and Vernon streets. Mack brick block. Laid by J. E. Burns & Co.	14	25	1909	
Lawn street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	32	1910	
Lawn street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	23	1910	
Lawrence street (city proper).....	At Berkeley street. Bitulithic. Laid by Warren Brothers Company.....	4	9	1906	
Lawrence street (city proper).....	Each side of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	5	14	1914	Sept. 25, 1919.
Lawrence street (Charlestown).....	East side of Lawrence avenue, across Miller street. Sicilian rock asphalt. Laid by Jones & Meehan.	385	1,014	1901	
Leslie street (Dorchester).....	Dix street to Centre street. Trinidad asphalt. Laid by D. M. Biggs & Co.,	374	1,090	1915	Oct. 16, 1920.
Lewis street (city proper).....	At Moon street. Bitulithic. Laid by Warren Brothers Company.....	1	2	1906	
Lincoln place (city proper).....	Worcester street to West Springfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	203	298	1897	

Linden street (Brighton).....	10 feet north of Brighton avenue to Brighton avenue. Artzec asphalt (macadam base). Laid by Bermudes Company.	10	22	1917	Dec. 7, 1922.
Linden street (Brighton).....	Brighton avenue to 10 feet south of Brighton avenue. Artzec asphalt (macadam base). Laid by Bermudes Company.	10	22	1917	Dec. 7, 1922.
Linden street (Brighton).....	22 feet north of Commonwealth avenue to Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	22	125	1917	May 21, 1923.
Linden Park street (Roxbury).....	12 feet east of Cabot street to 4 feet east of Elmwood street. Mack brick block. Laid by J. E. Burns & Co.	1,015	3,242	1909	
Lingard street (Dorchester).....	Magnolia street to Hartford street. Bitulithic. Laid by James Doherty...	594	1,791	1915	Sept. 17, 1920.
Lithgow street (Dorchester).....	Wainwright street to Talbot avenue. Mexican asphalt. Laid by Central Construction Company.	683	2,042	1917	May 30, 1922.
Lithgow street (Dorchester).....	At Washington street. Topoka (macadam base). Laid by Warren Brothers Company.	10	34	1918	Sept. 25, 1923.
Long avenue (Brighton).....	Commonwealth avenue to 11 feet north of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	11	31	1917	May 21, 1923.
Long avenue (Brighton).....	16 feet north of Commonwealth avenue to Allston street. Trinidad asphalt. Laid by Central Construction Company.	765	2,785	1914	Dec. 14, 1919.
Longwood avenue (Roxbury).....	51 feet north of Huntington avenue to 9 feet south of Brookline avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	2,078	7,850	1910	
Lorette street (West Roxbury).....	Centre street to Hilleret street. Artzec asphalt. Laid by Central Construction Company.	502	1,451	1916	July 10, 1922.
Lorne street (West Roxbury).....	Harvard street to 646 feet northwest of Harvard street. Mexican asphalt. Laid by Central Construction Company.	646	1,880	1917	Oct. 15, 1922.
Lovering street (city proper).....	8 feet east of Washington street to 8 feet west of Harrison avenue. Acme asphalt. Laid by James Doherty.	306	525	1913	
Lucas street (city proper).....	Middlesex street to 2 feet north of Shawmut avenue. Asphalt blocks.....	98	81	1902	
Lucas street (city proper).....	2 feet north of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	2	2	1898	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Lucas street (city proper)	Shawmut avenue to 2 feet south of Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	2	2	1888	
Lucas street (city proper)	10 feet south of Shawmut avenue to 9 feet north of Washington street. Scoria block. Laid by Paving Service.	322	254	1915	
Lyndehurst street (Dorchester)	At Washington street. Fine wood block. Laid by William J. Barry	10	30	1913	
Lynn street (city proper)	Copper street to Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	294	457	1906	
Mackin street (Brighton)	Western avenue to Waverly street. Bitulithic. Laid by A. H. Archer	292	656	1915	Nov. 26, 1920.
Magazine street (Roxbury)	At Dudley street. Mack brick block. Laid by James Doherty	10	30	1910	
Main street (Charlestown)	Boston & Maine Railroad to Somerville line. Hassam pavement. Laid by Simpson Brothers Corporation.	139	672	1906	
Maitland street (Roxbury)	Beacon street to Boston & Albany Railroad. Mack brick block. Laid by Fred S. & A. D. Gore Corporation.	186	537	1912	
Malcolm street (city proper)	Finchney street to Mt. Vernon street. Fine wood block. Laid by Fred S. & A. D. Gore Corporation.	312	244	1912	
Malcolm street (city proper)	54 feet south of Mt. Vernon street to 8 feet north of Chestnut street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	200	150	1892	
Malden street (city proper)	12 feet east of Washington street to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	519	1,501	1902	
Mall street (Roxbury)	At Dearborn street. Acme asphalt. Laid by Warren Brothers Company.	10 {	34	1916	Nov. 20, 1922.
	Beaumer brick block gutters. Laid by Warren Brothers Company			1916	Nov. 20, 1922.
Malvern street (Brighton)	At Brighton avenue. Artec asphalt (macadam base). Laid by Bermudez Company.	10	22	1917	Dec. 7, 1922.

				48	1917	Sept. 17, 1922.
Maple street (Roxbury).....	At Seaver street. Same asphalt (macadam base). Laid by Warren Brothers Company.		20		1917	
Market street (Brighton).....	At Washington street. Bitulithic. Laid by Warren Brothers Company. Pine wood block (brows to street car rails). Laid by Warren Brothers Company.	3 {		41 1	1913 1913	
Marlborough street (city proper).....	Arlington street to 15 feet west of Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	15		60	1901	
Marlborough street (city proper).....	15 feet west of Arlington street to 10 feet east of Clarendon street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	1,226		4,904	1901	
Marlborough street (city proper).....	10 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	10		40	1905	
Marlborough street (city proper).....	Clarendon street to Dartmouth street. Bitulithic (macadam base). Laid by James Doherty.	575		2,300	1914	Aug. 3, 1919.
Marlborough street (city proper).....	Dartmouth street, across Exeter street. Bitulithic (macadam base). Laid by James Doherty.	591		2,359	1914	Aug. 3, 1919.
Marlborough street (city proper).....	Exeter street, across Fairfield street. Bitulithic (macadam base). Laid by James Doherty.	660		2,616	1914	Aug. 3, 1919.
Marlborough street (city proper).....	Fairfield street, across Gloucester street. Bitulithic (macadam base). Laid by James Doherty.	562		2,248	1914	Aug. 3, 1919.
Marlborough street (city proper).....	Gloucester street, across Hereford street. Bitulithic (macadam base). Laid by James Doherty.	435		1,740	1914	Aug. 3, 1919.
Marlborough street (city proper).....	Hereford street to Massachusetts avenue. Bitulithic (macadam base). Laid by James Doherty.	665		2,660	1914	Aug. 3, 1919.
Marlborough street (Roxbury).....	Massachusetts avenue to 3 feet west. Sicilian rock asphalt. Laid by Boston Asphalt Company.	3		16	1901	
Marlborough street (Roxbury).....	11 feet west of Massachusetts avenue to Charlegate East. Bitulithic (macadam base). Laid by James Doherty.	640		2,418	1914	Aug. 3, 1919.
Marvin street (Roxbury).....	Shawmut avenue to Washington street. Pine wood block. Laid by Boston Paving Company.	256		573	1913	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Mason street (city proper).....	West street to 6 feet south of West street. Black gun wood block. Laid by United States Wood Preserving Company.	6	14	1908	
Mason street (city proper).....	6 feet south of West street to 213 feet south of West street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	209	459	1901	
Mason street (city proper).....	213 feet south of West street to 449 feet south of West street. Bitulithic. Laid by Warren Brothers Company.	236	480	1907	
Mason street (city proper).....	449 feet south of West street to 73 feet north of Avery street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	96	200	1909	
Mason street (city proper).....	73 feet north of Avery street to 63 feet north of Avery street. Seyssel rock asphalt. Laid by Jones & Meehan.	10	23	1899	
Mason street (city proper).....	63 feet north of Avery street to Avery street. Bitulithic. Laid by Coleman Brothers.	63	169	1914	Nov. 6, 1919.
Mason street (city proper).....	Angle 53 feet north of Avery street to 12 feet east of Tremont street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	73	175	1900	
Mason street (city proper).....	12 feet east of Tremont street to Tremont street. Pine wood block. Laid by Coleman Brothers.	12	31	1915	June 20, 1920.
Massachusetts avenue (city proper).....	Albany street to 2 feet east of Harrison avenue. (North roadway.) Pine wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Sicilian rock asphalt. Laid by Boston Asphalt Company.	622	1,899	1912	
Massachusetts avenue (city proper).....	2 feet east of Harrison avenue to Harrison avenue. Bitulithic. Laid by Warren Brothers Company.	2	1,866	1894	
Massachusetts avenue (city proper).....	Harrison avenue to 3 feet west of Harrison avenue. Bitulithic. Laid by Warren Brothers Company.	3	16	1905	
Massachusetts avenue (city proper).....			25	1905	

Massachusetts avenue (city proper).....	3 feet west of Harrison avenue to Washington street. (North roadway.) Pine wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Sicilian rock asphalt. Laid by Boston Asphalt Company	670	2,009 1,974	1912 1894
Massachusetts avenue (city proper).....	Washington street to Shawmut avenue. (North roadway.) Pine wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Acme asphalt. Laid by Warren Brothers Company.....	341	1,663 1,008	1912 1910
Massachusetts avenue (city proper).....	Shawmut avenue to Tremont street. (North roadway.) Pine wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Acme asphalt. Laid by Warren Brothers Company.....	921	2,889 2,946	1912 1910
Massachusetts avenue (city proper).....	Tremont street to 13 feet east of Columbus avenue. (North roadway.) Bitulithic. Laid by Warren Brothers Company. (South roadway.) Acme asphalt. Laid by Warren Brothers Company.....	519	1,606 1,584	1907 1910
Massachusetts avenue (city proper).....	13 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	13	106	1906-07
Massachusetts avenue (city proper).....	Columbus avenue to Providence Division, New York, New Haven & Hartford Railroad. Bitulithic. Laid by Warren Brothers Company.	469	2,248	1903-06
Massachusetts avenue (Roxbury).....	Providence Division, New York, New Haven & Hartford Railroad to Huntington avenue. Bitulithic. Laid by Warren Brothers Company.	551	2,100	1903-06
Massachusetts avenue (Roxbury).....	Huntington avenue, across Boylston street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	1,778	8,506	1901
Massachusetts avenue (Roxbury).....	Boylston street to bridge over Boston & Albany Railroad. Acme asphalt. Laid by Warren Brothers Company..... Sicilian rock asphalt. Laid by Boston Asphalt Company.....	96	440 12	1909 1901
Massachusetts avenue (Roxbury).....	Bridge over Boston & Albany Railroad. Pine wood block. Laid by Coleman Brothers.	75	500	1908
Massachusetts avenue (Roxbury).....	Bridge over Boston & Albany Railroad to 47 feet north of Newbury street. Trinidad asphalt. Laid by James Doherty.	175	767	1914
Massachusetts avenue (Roxbury).....	47 feet north of Newbury street to 27 feet south of Marlborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	656	3,301	1901

Nov. 14, 1919.

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area. Square Yards.	Year Laid.	Guaranty Expires.
Massachusetts avenue (city proper).....	27 feet south of Marlborough street to south side of Beacon street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	326	1,557	1901	
Massachusetts avenue (city proper).....	Southerly side Beacon street to Harvard Bridge. Bitulithic. Laid by Warren Brothers Company.	237	1,080	1902	
Matchett street (Brighton).....	Washington street to 35 feet south of Perthshire road. Mexican asphalt. Laid by Central Construction Company.	852	2,105	1917	July 5, 1922.
Maverick square (East Boston).....	Sumner street, across Maverick street. Aztec asphalt. Laid by Bermudez Company.	499	2,954	1917	Dec. 15, 1922.
Maverick street (East Boston).....	7 feet west of London street to 7 feet east of Harvre street. Bitulithic. Laid by Warren Brothers Company.	162	558	1903	
Maverick street (East Boston).....	At Maverick square. Aztec asphalt. Laid by Bermudez Company.....	11	45	1917	Dec. 15, 1922.
Maverick street (East Boston).....	Bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by E. R. Taylor Company.....	38 {	59 72	1906-07 1906	
Mayhew street (Dorchester).....	Roseclair street to Boston street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	846	2,461	1915	July 19, 1920.
Mayo street (city proper).....	7 feet south of Castle street to Cobb street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	244	406	1897	
Maywood street (Roxbury).....	At Blue Hill avenue. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	3	17	1917	
McLean street (city proper).....	Chambers street to 8 feet east of Blossom street. Bitulithic. Laid by Warren Brothers Company.	510	1,307	1905	
McLean street (city proper).....	8 feet east of Blossom street to Blossom street. 4 core asphalt. Laid by Warren Brothers Company.....	8 {	39 3	1917 1917	Nov. 15, 1922. Nov. 15, 1922.
	Bessmer brick block gutters. Laid by Warren Brothers Company.....				

Meander street (city proper).....	292	416	1896
7 feet east of East Dedham street to 8 feet west of Malden street. Sicilian rock asphalt. Laid by Boston Asphalt Company.			
Meander street (city proper).....	8	11	1902
8 feet west of Malden street to Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.			
Melrose street (city proper).....	7	19	1913
Broadway to 7 feet west of Broadway. Pine wood block. Laid by Coleman Brothers.			
Melrose street (city proper).....	737	1,885	1911
7 feet west of Broadway to Ferdinand street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.			
Melville avenue (Dorchester).....	10	40	1913
At Washington street. Pine wood block. Laid by William J. Barry.....			
Melvin side terrace (Dorchester).....	193	404	1915
Dorchester avenue to Minton street. Bitulithic. Laid by James Doherty..			
Mercer street (South Boston).....	4	16	1905
At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....			
Meridian street (East Boston).....	9	12	1917
At Maverick square. Astec asphalt. Laid by Bermudes Company.....			
Meridian street (East Boston).....	221	540	1900
24 feet north of Trenton street to 9 feet east of Eutaw street. Sicilian rock asphalt. Laid by Jones & Meehan.			
Middleton street (Dorchester).....	9	26	1918
At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....			
Middleton street (Dorchester).....	6	18	1917
At Theodore street. Mexican asphalt. Laid by Central Construction Company.			
Milk street (city proper).....	300	1,156	1910
20 feet west of east side of Pearl street, across Oliver street. Pine wood block. Laid by James Doherty.			
Milk street (city proper).....	279	1,045	1911
Oliver street to 8 feet west of Broad street. Pine wood block. Laid by James Doherty.			
Miller street (Charlestown).....	195	367	1901
Main street to Lawrence street. Sicilian rock asphalt. Laid by Jones & Meehan.			
Millet street (Dorchester).....	26	135	1911
Each side of Talbot avenue. Mack brick block. Laid by James Doherty...			
Milton avenue (Dorchester).....	18	123	1914
Each side of Norfolk street. Bitulithic. Laid by James Doherty.....			
Milton street (city proper).....	2	3	1895
Spring street to 2 feet north of Spring street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.			
			July 11, 1919.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Milton street (city proper).....	2 feet north of Spring street to Brighton street. Seamed rock asphalt. Laid by Jones & Meenan.	308	271	1899	
Mindora street (Roxbury).....	At Station street. Bitulithic. Laid by John F. Beatty.....	1	3	1914	Dec. 18, 1919.
Minton street (West Roxbury).....	Brookside avenue to Amory street. Topoka. Laid by Warren Brothers Company.	421	1,000	1918	June 18, 1923.
Montebello road (West Roxbury).....	Forest Hills street to Walnut avenue. Bitulithic. Laid by Martino De Matteo.	1,077	3,051	1916	July 24, 1921.
Montgomery street (city proper).....	Each side of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	5	29	1914	Sept. 25, 1919.
Montgomery street (city proper).....	At West Canton street. Acme asphalt (macadam base). Laid by Warren Brothers Company.	3	15	1916	Oct. 21, 1921.
Moon street (city proper).....	North square to 5 feet east of North square. Bitulithic. Laid by Warren Brothers Company.	5	11	1906	
Moon street (city proper).....	5 feet east of North square to 6 feet west of Lewis street. Laid by Barber Asphalt Paving Company.	161	285	1891	
Moon street (city proper).....	6 feet west of Lewis street to 7 feet east of Fleet street. Bitulithic. Laid by Warren Brothers Company.	100	188	1906	
Morse street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	30	1912	
Morton street (city proper).....	Salem street to 33 feet west of Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	33	26	1901	
Morton street (city proper).....	33 feet west of Salem street to 84 feet east of Endicott street. Concrete road. Laid by John E. Leahy Construction Company.	209	162	1918	Dec. 28, 1919
Morton street (city proper).....	84 feet east of Endicott street to 51 feet east of Endicott street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	33	26	1901	

Morton street (city proper).....	51 feet east of Endicott street to 6 feet east of Endicott street. Standard asphalt. Laid by Central Construction Company.	45	35	1916
Morton street (Dorchester).....	Each side of Norfolk street. Bitulithic. Laid by Warren Brothers Company.	16	108	1918
Motley street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	9	21	1906
Motte street (city proper).....	7 feet east of Washington street to 12 feet west of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	317	598	1892-99
Moulton street (Charlestown).....	Easterly side of Corey street to Vine street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	81	243	1897
Moulton street (Charlestown).....	Vine street to 8 feet east of Bunker Hill street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	113	343	1897
Moultrie street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.	8	24	1913
Mt. Ida road (Dorchester).....	At Bowdoin street. Pine wood block. Laid by James Doherty.	11	67	1909
Mt. Pleasant avenue (Roxbury).....	Each side of Dudley street. Mack brick block. Laid by James Doherty.	21	73	1910
Mt. Vernon street (city proper).....	Archway under State House. Limer rock and some asphalts mixed. Laid by Porter & Pearl.	164	455	1911
Mt. Vernon street (city proper).....	State House to Joy street. Canton block. Brick block.	263	776	1901
Murdock street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company.	10	31	1918
Museum road (Roxbury).....	Huntington avenue to the Fenway. Topeka. Laid by Warren Brothers Company.	625	2,072	Dec. 24, 1923 April 16, 1923.
Mystic avenue (Charlestown).....	East side of bridge over Boston & Maine Railroad to Somerville line. Metropolitan brick.	187	756	1910
Mystic street (city proper).....	Malden street to 7 feet west of Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	7	6	1902
Mystic street (city proper).....	7 feet west of Malden street to 7 feet east of East Dedham street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	190	209	1896
Mystic street (city proper).....	East Dedham street to East Canton street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	202	315	1896

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Mystic street (city proper).....	East Canton street to East Brookline street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	202	315	1896	
Nashua street (city proper).....	At post office. Pine wood block. Laid by city force.....	17	72	1916	
Nassau street (city proper).....	At Ash street. Acme asphalt. Laid by Warren Brothers Company.....	7	15	1909	
Nelson street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	15	71	1914	July 11, 1919.
Neponset avenue (Dorchester).....	Adams street to 25 feet south of Ashmont street (west side). Topeka. Laid by city force.	.....	3,596	1918	.
Neptune road (East Boston).....	West side Boston, Revere Beach & Lynn Railroad to Bennington street. Mexican asphalt. Laid by Central Construction Company.	1,700	7,846	1917-18	Aug. 2, 1923.
Newbury street (city proper).....	At Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	4	16	1901	
Newbury street (city proper).....	Each side of Berkeley street. Bitulithic. Laid by Warren Brothers Company.	4	18	1903	
Newbury street (city proper).....	4 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	4	7	1905	
Newbury street (city proper).....	Clarendon street to 4 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	4	17	1905	
Newbury street (city proper).....	Each side of Dartmouth street. Bitulithic. Laid by Warren Brothers Company.	9	38	1903	
Newbury street (city proper and Roxbury).....	Fairfield street to 8 feet east of Hereford street. Pine wood block. Laid by United States Wood Preserving Company.	940	3,760	1901	
Newbury street (Roxbury).....	8 feet east of Hereford street to 148 feet east of Massachusetts avenue. Pine wood block. Laid by Patrick McGovern.	565	2,327	1901	

Newbury street (Roxbury)	148 feet east of Massachusetts avenue to 15 feet east of Massachusetts avenue. Pine wood block. Laid by James Doherty.	133	465	1914	Nov. 14, 1910.
Newbury street (Roxbury)	15 feet east of Massachusetts avenue to Massachusetts avenue. Trinidad asphalt. Laid by James Doherty.	15	65	1914	Nov. 14, 1919.
Newbury street (Roxbury)	Massachusetts avenue to 16 feet west of Massachusetts avenue. Trinidad asphalt. Laid by James Doherty.	16	55	1914	Nov. 14, 1919.
Newland street (city proper)	West Brookline street to Pembroke street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	158	228	1902	
Newland street (city proper)	Pembroke street to West Newton street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	155	224	1902	
Nightingale street (Dorchester)	At Talbot avenue. Mack brick block. Laid by James Doherty	13	81	1911	
Norfolk street (Dorchester)	Washington street to 6 feet south of Washington street. Pine wood block. Laid by William J. Barry.	6	75	1913	
Norfolk street (Dorchester)	78 feet west of Talbot avenue to 57 feet east of Edison street. Bitulithic. Laid by James Doherty.	1,795	6,550	1913	July 11, 1919.
Norfolk street (Dorchester)	Pine wood block. (Brows to street car rails.) Laid by James Doherty.		533	1913	July 11, 1919.
Norfolk street (Dorchester)	57 feet east of Edison street to bridge over New York, New Haven & Hartford Railroad, Midland Division. Bitulithic. Laid by James Doherty.	2,352	8,222	1914	July 11, 1919.
Norfolk street (Dorchester)	Pine wood block. (Brows to street car rails.) Laid by James Doherty.		671	1914	July 11, 1919.
Norfolk street (Dorchester)	Bridge over New York, New Haven & Hartford Railroad, Midland Division, to Blue Hill avenue. Bitulithic. Laid by Warren Brothers Company.	3,705	18,669	1918	Nov. 4, 1923.
Norman street (city proper)	7 feet north of Green street to South Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	391	697	1905	
Normandy street (Dorchester)	North side Intervale street to Devon street. Astec asphalt. Laid by Central Construction Company.	485	1,403	1916	Oct. 13, 1921.
Normandy street (Dorchester)	Seaver street to Columbia road. Trinidad asphalt. Laid by James Doherty.	458	1,330	1915	Oct. 22, 1920.
North square (city proper)	North street to Moon street. Bitulithic. Laid by Warren Brothers Company.	235	1,217	1906	
Northampton street (city proper)	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906	

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Northampton street (city proper).....	14 feet south of Tremont street to 9 feet north of Shawmut avenue. Wood block. Laid by Fred S. & A. D. Gore Corporation.	894	3,370	1911	
Northampton street (city proper).....	Shawmut avenue to Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	370	648	1905	
Northampton street (city proper).....	At Albany street. Pine wood block. Laid by Bernard E. Grant.	.....	47	1917	Jan. 19, 1923.
North Anderson street (city proper).....	7 feet south of Parkman street to Parkman street. Acme asphalt. Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	7 {	16 4	1916 1916	Nov. 28, 1921. Nov. 28, 1921.
North Anderson street (city proper).....	Parkman street to Fruit street. Acme asphalt. Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	77 {	174 43	1916 1916	Nov. 28, 1921. Nov. 28, 1921.
North Beacon street (Brighton).....	Cambridge street to Market street. Bitulithic. Laid by Warren Brothers Company.	3,237	11,852	1918	Dec. 24, 1923.
North Beacon street (Brighton).....	East side of bridge over Charles river to the Watertown line. Pine wood block. Laid by A. G. Tomasello.	193	1,170	1917	
North Bennet street (city proper).....	Hanover street to Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	545	910	1904	
North Grove street (city proper).....	Cambridge street to Fruit street. Acme asphalt. Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	459 {	1,270 245	1917 1917	Aug. 24, 1922. Aug. 24, 1922.
North Harvard street (Brighton).....	33 feet north of Soldiers Field road to Cambridge line. Pine wood block. Laid by Rowe Contracting Company.	219	973	1914	
North Margin street (city proper).....	Stillman street to 6 feet south of Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	511	1,161	1895	
North Margin street (city proper).....	6 feet north of Thacher street to 190 feet north of Thacher street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	184	476	1897	

North Russell street (city proper).....	Cambridge street, across Eaton street. Artex asphalt. Laid by Bermudes Company.	434	998	1917	Nov. 3, 1922
Norway street (Roxbury).....	Falmouth street to 4 feet west of St. Paul street. Pine wood block. Laid by United States Wood Preserving Company.	307	917	1909	
Norway street (Roxbury).....	Each side of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	8	12	1901	
Norwell street (Dorchester).....	At Talbot avenue. Mack brick block. Laid by James Doherty.....	13	43	1911	
Norwich street (city proper).....	Myrtle street to Meander street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	221	339	1896	
Oakwood street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	1	4	1913	July 11, 1919.
Ohio street (city proper).....	Washington street to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	329	264	1896	
Old Harbor street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	5	17	1905	
Oliver street (city proper).....	Milk street to 152 feet southerly. Pine wood block. Laid by James Doherty.	152	591	1910	
Olney street (Dorchester).....	At Geneva avenue. Mack brick block. Laid by Central Construction Company.	32	204	1911	
Oneida street (city proper).....	7 feet east of Harrison avenue to 7 feet west of Albany street. Bitulithic. Laid by Warren Brothers Company.	494	1,043	1903	
Orchard street (Roxbury).....	At Eustis street. Bitulithic. Laid by John F. Beatty.....	1	4	1914	Sept. 4, 1919.
Orchardfield street (Dorchester).....	Fresport street to Dorchester avenue. Artex asphalt. Laid by Central Construction Company.	814	1,266	1916	Dec. 7, 1921.
Oswego street (city proper).....	Harrison avenue to 27 feet east of Harrison avenue. Artex asphalt. Laid by Bermudes Company.	27	57	1918	
Oswego street (city proper).....	27 feet east of Harrison avenue to Albany street. Seyssel rock asphalt. Laid by Jones & Mehan.	478	1,008	1899	
Otis street (city proper).....	At Summer street. Pine wood block. Laid by Northern Construction Company.	8	29	1915	Aug. 16, 1920.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Oxford street (city proper).....	8 feet north of Beach street to 7 feet south of Essex street (macadam base). Mexican asphalt. Laid by Central Construction Company.	415	734	1917	
Paisley park (Dorchester).....	At Upland avenue. Aztec asphalt. Laid by Central Construction Com- pany.	15	53	1916	Nov. 28, 1921.
Palmer street (Roxbury).....	121 feet east of Winslow street to 203 feet west of Eustis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	132	293	1906	
Park square (city proper).....	Boylston street to 100 feet south of Boylston street. Pine wood block. Laid by United States Wood Preserving Company.	{ 100 2	715 280	1914 1915	
Park square (city proper).....	100 feet south of Boylston street, across Eliot street. Black gum wood block. Laid by United States Wood Preserving Company.	382	2,797	1907	
Park square (city proper).....	At Providence street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	.....	325	1912	
Park street (city proper).....	At Tremont street. Pine wood block. Laid by Coleman Brothers.....	7	59	1915	June 20, 1920.
Park street (city proper).....	39 feet north of Tremont street to 152 feet south of Beacon street. Filbertine. Laid by Warren Brothers Company	326	959	1918	July 26, 1923.
Park street (Dorchester).....	Each side of Washington street. Pine wood block. Laid by William J. Barry.	20	80	1913	
Parker street (Roxbury).....	10 feet north of Edgar street to 8 feet south of Caldwell street. Bitulithic. Granite block base. Laid by Warren Brothers Company.	218	837	1912	
Parker street (Roxbury).....	8 feet south of Caldwell street to 8 feet north of Ward street. Standard asphalt and Aztec asphalt (granite block base). Laid by Central Con- struction Company.	457	1,767	1916	
Parkland street (Brighton).....	Winship street to Academy Hill road. Astec asphalt. Laid by Coleman Brothers.	400	524	1917	Oct. 16, 1922.

Parkman street (city proper).....	North Grove street to 7 feet east of North Anderson street. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.	203	369 100	1916 1916	Nov. 28, 1921. Nov. 28, 1921.
Parkman street (city proper).....	7 feet east of North Anderson street, across Blossom street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	234	534	1898	
Parkman street (city proper).....	Blossom street to 7 feet west of North Russell street. Acme asphalt. Laid by Warren Brothers Company.	229	476	1910	
Parkman street (city proper).....	7 feet west of North Russell street to North Russell street. Astec asphalt. Laid by Bermudes Company.	7	12	1917	Nov. 3, 1922.
Parkton road (West Roxbury).....	Perkins street to Perkins street. Concrete road. Laid by city force.	1,169	2,903	1916	
Parkvale avenue (Brighton).....	Brighton avenue to 10 feet south of Brighton avenue. Astec asphalt (macadam base). Laid by Bermudes Company.	10	22	1917	Dec. 7, 1922.
Parkvale avenue (Brighton).....	10 feet south of Brighton avenue to Glenville avenue. Astec asphalt. Laid by Bermudes Company.	879	2,548	1918	July 25, 1923.
Parkview street (Roxbury).....	At Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company.	20	80	1917	Sept. 17, 1922.
Parmenter street (city proper).....	9 feet west of Hanover street to 5 feet east of Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	265	723	1902	
Parmenter street (city proper).....	5 feet east of Salem street to Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	5	15	1901	
Parnell street (city proper).....	Lenox street to Sawyer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	250	348	1902	
Paul street (city proper).....	Emerald street to 1 foot west of Emerald street. Bitulithic. Laid by Warren Brothers Company.	1	2	1904	
Paul street (city proper).....	1 foot west of Emerald street to Tremont street, minus intersections at Village and Albion streets. Seyssel rock asphalt. Laid by Jones & Meehan.	368	635	1897	
Peacevale road (Dorchester).....	Norfolk street to 1 foot south of Norfolk street. Bitulithic. Laid by James Doherty.	1	4	1914	July 11, 1919.
Peacevale road (Dorchester).....	1 foot south of Norfolk street to 7 feet north of Dunbar avenue. Trinidad asphalt. Laid by D. M. Biggs & Co.	801	2,315	1915	Oct. 14, 1920.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Pearl street (city proper).....	Milk street to 153 feet south of Milk street. Laid by James Doherty.	153	508	1910	
Pelham street (city proper).....	Washington street to Shawmut avenue. Mexican asphalt. Laid by Central Construction Company.	303	655	1917	
Pemberton square (city proper).....	Front of Suffolk County Courthouse. Sicilian rock asphalt. Laid by Boston Asphalt Company.	323	1,365	1894	
Pembroke street (city proper).....	At Columbus square. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.	4	17	1912	
Percival street (Dorchester).....	At Bowdoin street. Topeka (macadam base). Laid by city force.....	2	7	1918	
Perham street (West Roxbury).....	New York, New Haven & Hartford Railroad to Vermont street. Mexican asphalt. Laid by Central Construction Company.	2,630	6,195	1917	Sept. 12, 1922.
Perth street (Dorchester).....	Quincy street to Fayston street. Bitulithic. Laid by James Doherty.....	218	630	1915	June 23, 1920.
Piedmont street (city proper).....	At Broadway. Pine wood block. Laid by Coleman Brothers.....	11	26	1913	
Pinckney street (city proper).....	7 feet west of Charles street, across Brimmer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	264	708	1895	
Pine street (city proper).....	7 feet east of Washington street to 10 feet west of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	403	567	1896	
Pleasant street (Dorchester).....	Hancock street to 84 feet north of Hancock street. Bessemer brick block. Laid by Fred S. & A. D. Gore Corporation.	84	1,112	1911	
Poplar street (city proper).....	Chambers street, across Spring street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	615	1,250	1892	
Poplar street (city proper).....	Spring street to 8 feet south of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	572	1,175	1887	

Porter street (city proper).....	Bridge over Boston Elevated Railway. Pine wood block. Laid by Coleman Brothers.	11	18	1913
Porter street (East Boston)	Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murtfeldt Company.	37	128	1907
Powellton road (Dorchester).....	Columbia road to Glenarm street. Bitulithic. Laid by James Doherty	329	950	1915 June 19, 1920.
Prescott street (Charlestown).....	At Harvard street. Astec asphalt (macadam base). Laid by Bermudes Company.	.....	15	1918 June 8, 1923.
Prescott street (East Boston).....	Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murtfeldt Company.	36	125	1907
Prince street (city proper).....	Garden Court street to Hanover street. Bitulithic. Laid by Warren Brothers Company.	134	223	1906
Prince street (city proper).....	9 feet west of Hanover street to 293 feet west of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	284	634	1895
Prince street (city proper).....	293 feet west of Hanover street to 15 feet east of Salem street. Sicilian rock asphalt. Laid by Jones & Meehan.	198	457	1900
Prince street (city proper).....	15 feet east of Salem street to Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	15	40	1901
Prince street (West Roxbury).....	Arborway at Centre street to Pond street. Trinidad asphalt. Laid by Charles J. Jacobs Company.	1,379	4,079	1915 Nov. 22, 1920.
Providence street (city proper).....	Park square to 75 feet east of Church street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	161	1,400	1912
Providence street (city proper).....	At east side of Church street. Bessemer brick block. Laid by Coleman Brothers.	.....	23	1918 Dec. 2, 1919.
Providence street (city proper).....	Arlington street to 5 feet west of Arlington street. Bessemer brick block. Laid by Coleman Brothers.	5	19	1918 Dec. 2, 1919.
Public Alley No. 12 (city proper).....	Poplar street to Public Alley No. 14. Sicilian rock asphalt. Laid by Boston Asphalt Company.	77	68	1903
Public Alley No. 102 (city proper).....	23 feet south of Marshall street to Creek square. Seyssel rock asphalt. Laid by Jones & Meehan.	182	184	1899

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Public Alley No. 301 (city proper).....	Pinkney street to River street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	270	400	1897	
Public Alley No. 401 (city proper).....	Between Huntington avenue and St. Botolph street, from 96 feet west of Irvington street to 40 feet east of Garrison street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	350	362	1899	
Public Alley No. 402 (city proper).....	Between Huntington avenue and St. Botolph street, from 67 feet west of Garrison street to 77 feet east of West Newton street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	358	374	1899	
Public Alley No. 403 (city proper).....	Between Huntington avenue and St. Botolph street, from 65 feet west of West Newton street to 62 feet east of Cumberland street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	355	370	1899	
Public Alley No. 404 (Roxbury).....	Between Huntington avenue and St. Botolph street, from 66 feet south of Cumberland street to Public Alley No. 405. Trinidad asphalt. Laid by Simpson Brothers Corporation.	534	533	1899	
Public Alley No. 405 (Roxbury).....	Rear of northeast side of Massachusetts avenue, from 94 feet east of Huntington avenue to 62 feet west of St. Botolph street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	100	89	1899	
Public Alley No. 414 (city proper).....	Between Beacon street and Marlborough street, from 53 feet east of Massachusetts avenue to Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	609	569	1901	
Public Alley No. 415 (city proper).....	Between Beacon street and Marlborough street, from Hereford street to Gloucester street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	304	378	1901	
Public Alley No. 416 (city proper).....	Between Beacon street and Marlborough street, from Gloucester street to Fairfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	520	490	1901	

Public Alley No. 417 (city proper)	Between Beacon street and Marlborough street, from Fairfield street to Exeter street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	620	579	1901
Public Alley No. 418 (city proper)	At Dartmouth street. Bitulithic. Laid by Warren Brothers Company.....	4	4	1903
Public Alley No. 419 (city proper)	Dartmouth street to 4 feet east of Dartmouth street. Bitulithic. Laid by Warren Brothers Company.	4	4	1903
Public Alley No. 419 (city proper)	Between Beacon street and Marlborough street, from 4 feet east of Dartmouth street to 12 feet west of Clarendon street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	550	488	1899
Public Alley No. 419 (city proper)	12 feet west of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	12	11	1905
Public Alley No. 420 (city proper)	Clarendon street to 10 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	10	9	1905
Public Alley No. 420 (city proper)	Between Beacon street and Marlborough street, from 10 feet east of Clarendon street to Berkeley street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	561	498	1897
Public Alley No. 421 (city proper)	15 feet west of Arlington street to 3 feet west of Arlington street. Vitrified brick.	12	11	
Public Alley No. 421 (city proper)	3 feet east of Arlington street to Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	3	3	1901
Public Alley No. 422 (city proper)	Between Commonwealth avenue and Marlborough street, from Arlington street to Berkeley street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	620	579	1902
Public Alley No. 423 (city proper)	Between Commonwealth avenue and Marlborough street, from Berkeley street to 3 feet east of Clarendon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	574	538	1902
Public Alley No. 423 (city proper)	3 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company.	3	3	1905
Public Alley No. 424 (city proper)	Clarendon street to 3 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	3	3	1905

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Public Alley No. 424 (city proper).....	Between Commonwealth avenue and Marlborough street, from 3 feet west of Clarendon street to 3 feet east of Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	549	487	1902	
Public Alley No. 424 (city proper).....	3 feet east of Dartmouth street to Dartmouth street. Bitulithic. Laid by Warren Brothers Company.	3	3	1903	
Public Alley No. 425 (city proper).....	Dartmouth street to 8 feet west of Dartmouth street. Bitulithic. Laid by Warren Brothers Company.	8	7	1903	
Public Alley No. 425 (city proper).....	Between Commonwealth avenue and Marlborough street, from 8 feet west of Dartmouth street to 9 feet east of Exeter street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	548	478	1899	
Public Alley No. 426 (city proper).....	Between Commonwealth avenue and Marlborough street, from Exeter street to Fairfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	620	501	1901	
Public Alley No. 428 (city proper and Roxbury).....	Between Commonwealth avenue and Marlborough street, from Gloucester street to Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	392	376	1901	
Public Alley No. 429 (Roxbury).....	Between Commonwealth avenue and Marlborough street, from 55 feet west of Hereford street to 77 feet east of Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	530	501	1901	
Public Alley No. 429 (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	5	4	1901	
Public Alley No. 430 (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	7	6	1901	
Public Alley No. 431 (city proper and Roxbury).....	Between Commonwealth avenue and Newbury street, from 7 feet east of Hereford street to 83 feet west of Gloucester street. Trinidad asphalt. Laid by Simpson Brothers Corporation.	305	271	1899	

Public Alley No. 434 (city proper).....	Between Commonwealth avenue and Newbury street, from Exeter street to 3 feet west of Dartmouth street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	550	478	1901
Public Alley No. 434 (city proper).....	3 feet west of Dartmouth street to Dartmouth street. Bitulithic. Laid by Warren Brothers Company.	3	3	1903
Public Alley No. 435 (city proper).....	At Dartmouth street. Bitulithic. Laid by Warren Brothers Company.....	3	3	1903
Public Alley No. 435 (city proper).....	At Clarendon street. Bitulithic. Laid by Warren Brothers Company.....	4	4	1905
Public Alley No. 436 (city proper).....	Clarendon street to 15 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	15	13	1905
Public Alley No. 436 (city proper).....	Between Commonwealth avenue and Newbury street, from 15 feet east of Clarendon street to Berkeley street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	562	528	1901
Public Alley No. 437 (city proper).....	Between Commonwealth avenue and Newbury street, from Berkeley street to Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	628	558	1898
Public Alley No. 438 (city proper).....	Arlington street to 3 feet west of Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	3	3	1901
Public Alley No. 438 (city proper).....	Between Newbury street and Boylston street, from 3 feet west of Arlington street to 3 feet east of Berkeley street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	625	583	1901
Public Alley No. 438 (city proper).....	3 feet east of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company.	3	3	1903
Public Alley No. 439 (city proper).....	Clarendon street to 3 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company.	3	3	1905
Public Alley No. 439 (city proper).....	Clarendon street to Dartmouth street. Vitrified brick.	553	492	1894
Public Alley No. 439 (city proper).....	At Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1	1	1894
Public Alley No. 440 (city proper).....	Between Newbury street and Boylston street, from Dartmouth street to 3 feet west of Dartmouth street. Bitulithic. Laid by Coleman Brothers.	3	7	1914

Nov. 3, 1919.

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Public Alley No. 440 (city proper).....	Between Newbury street and Boylston street, from 3 feet west of Dartmouth street to Exeter street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	550	520	1901	
Public Alley No. 441 (city proper).....	Between Newbury street and Boylston street, from Exeter street to Fairfield street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	617	548	1903	
Public Alley No. 442 (city proper).....	Between Newbury street and Boylston street, from 59 feet west of Fairfield street to 110 feet east of Gloucester street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	351	312	1901	
Public Alley No. 442 (city proper).....	Between Newbury street and Boylston street, from 110 feet east of Gloucester street to Gloucester street. Pine wood block. Laid by Boston Asphalt Company.	100	89	1901	
Public Alley No. 444 (Roxbury).....	350 feet west of Hereford street to 532 feet west of Hereford street. Concrete road. Laid by Boston Transit Commission.	182	318	1914-15	
Public Alley No. 701 (city proper).....	Between Union Park street and Upton street, from 130 feet east of Tremont street to Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	521	611	1899	
Public Alley No. 702 (city proper).....	Between Shawmut avenue and Tremont street, from Worcester street to West Springfield street. Seyssel rock asphalt. Laid by Jones & Meehan.	208	208	1899	
Public Alley No. 703 (city proper).....	40 feet west of Newland street to 40 feet east of Public Alley No. 702. Seyssel rock asphalt. Laid by Jones & Meehan.	118	103	1899	
Public Alley No. 705 (city proper).....	Street line of Tremont street to street line of Shawmut avenue. Concrete.....	649	1,262		
Public Alley No. 821 (Roxbury).....	At Gainsborough street. Bitulithic. Laid by Warren Brothers Company....	3	3	1903	
Public Alley No. 901 (Roxbury).....	From 113 feet west of Hemenway street to 113 feet west of Hemenway street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	573	550	1902	
Public Alley No. 905 (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	5	4	1901	

	1915	1916	1917	1918	1919	Oct. 9, 1920.
Public Alley No. 908 (Roxbury).....	493	552	493	1915	Oct. 9, 1920.	
Quincy street (Dorchester).....	8	41	1918			
Quint avenue (Brighton).....	10	22	1917		Dec. 7, 1922.	
Raleigh street (Roxbury).....	12	27	1918		June 1, 1923.	
Randall street (city proper and Roxbury).....	325	724	1916		Aug. 18, 1921.	
Randall street (Roxbury).....	264	765	1916		Aug. 18, 1921.	
Randall street (Roxbury).....	1	4	1918			
Raven street (Dorchester).....	438	1,264	1915		June 22, 1920.	
Reedsdale street (Brighton).....	10	25	1917		Dec. 7, 1922.	
Richwood street (West Roxbury).....	1,237	2,782	1917		June 19, 1923.	
Ridgewood street (Dorchester).....	1,063	3,075	1915		July 29, 1920.	
Rill street (Dorchester).....	10	29	1910			
Ripley road (Dorchester).....	673	1,946	1916		Dec. 11, 1921.	
River street (city proper).....	564	1,220	1912			
Rochester street (city proper).....	493	1,108	1914			

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Rogers street (South Boston).....	Dorchester street to 21 feet south of Dorchester street. Bitulithic. Laid by Warren Brothers Company.	21	28	1914	Nov. 11, 1919.
Rogers street (South Boston).....	21 feet south of Dorchester street to 12 feet north of Preble street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	332	445	1891	
Rose street (city proper).....	8 feet east of Harrison avenue to 13 feet west of Albany street. Mexican asphalt (macadam base). Laid by Central Construction Company.	483	1,073	1917	
Rosedale street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	32	1913	
Rosemary street (West Roxbury).....	At South street. Astec asphalt (macadam base). Laid by Bermudes Company.	3	11	1918	Sept. 28, 1923.
Rosewood street (Dorchester).....	Oakland street to Randolph road. Trinidad asphalt. Laid by John Kelly Company.	1,524	4,417	1916	June 24, 1921.
Roslin street (Dorchester).....	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	10	45	1918	Sept. 25, 1923.
Rowell street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	39	1911	
Roxbury street (Roxbury).....	Washington street to Guild row. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	170	895	1904	
Roxbury street (Roxbury).....	Shawmut avenue, across Kent street. Bitulithic. Laid by Warren Brothers Company.	557	2,160	1904	
Rugby road (Dorchester).....	Oakland street to Randolph road. Mexican asphalt. Laid by Central Construction Company.	552	1,333	1917	July 28, 1922.
Ruggles street (Roxbury).....	Washington street to Shawmut avenue. Pine wood block. Laid by Boston Paving Company.	455	1,277	1913	
Ruggles street (Roxbury).....	7 feet west of Shawmut avenue to Cabot street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	1,048	3,062	1907	

Rugles street (Roxbury).....	Cabot street to Tremont street. Mack brick block. Laid by J. E. Burns & Co.	460	1,874	1909
Rutland square (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	56	1906-07
St. Alphonsus street (Roxbury).....	9 feet north of Tremont street, across Smith street. Bitulithic. Laid by Warren Brothers Company.	512	1,479	1905
St. Botolph street (city proper).....	9 feet east of West Newton street to West Newton street. Bitulithic. Laid by Central Construction Company.	9	36	1917
St. Botolph street (city proper).....	West Newton street to 9 feet west of West Newton street. Bitulithic. Laid by Central Construction Company.	9	36	1917
St. Botolph street (Roxbury).....	Each side of Massachusetts avenue. Bitulithic. Laid by Warren Brothers Company.	8	32	1903
St. Cecilia street (Roxbury).....	At Belvidere street. Bitulithic. Laid by Warren Brothers Company.	1	3	1902
St. Charles street (city proper).....	At Chandler street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company.	3 { 8 2	1916 Oct. 28, 1921. Oct. 28, 1921.	1916
St. Francis de Sales street (Roxbury).....	Cabot street to Roxbury street. Bitulithic. Laid by James Doherty.	452	746	1914 Sept. 8, 1919.
St. Germain street (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	2	10	1901
St. James avenue (city proper).....	8 feet west of Clarendon street to Huntington avenue. Bitulithic. Laid by Boston Elevated Railway Company.	453	1,576	1914 Nov., 1919.
St. James avenue (city proper).....	At Huntington avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	17	1901	
St. James avenue (city proper).....	At Huntington avenue. Bitulithic. Laid by James Doherty.	590	1912	
St. Joseph street (West Roxbury).....	At South street. Bitulithic. Laid by Warren Brothers Company.	2	5	1913
St. Lukes road (Brighton).....	Brighton avenue to 10 feet south of Brighton avenue. Astec asphalt (macadam base). Laid by Bermudez Company.	10	22	1917 Dec. 7, 1922.
St. Lukes road (Brighton).....	24 feet north of Commonwealth avenue to Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	24	62	1917

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
St. Paul street (Roxbury)	Falmouth street to Norway street. Pine wood block. Laid by United States Wood Preserving Company.	299	777	1909	
St. Rose street (West Roxbury)	At South street. Astec asphalt (macadam base). Laid by Bermudes Company.	7	22	1918	Sept. 28, 1923.
St. Stephen street (Roxbury)	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	2	9	1901	
St. William street (Dorchester)	Dorchester avenue to Auckland street. Trinidad asphalt. Laid by J. J. Sullivan.	317	923	1915	Oct. 18, 1920.
Salem street (city proper)	Endicott street to 6 feet south of Cross street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	172	328	1901	
Salem street (city proper)	6 feet north of Cross street to 5 feet north of south side of Baldwin place. Sicilian rock asphalt. Laid by Boston Asphalt Company.	700	1,384	1901	
Salem street (city proper)	5 feet north of south side of Baldwin place to 64 feet north of Baldwin place. Bituthic. Laid by Warren Brothers Company.	74	150	1913	
Salem street (city proper)	64 feet north of Baldwin place to 1 foot north of Prince street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	117	262	1901	
Salutation street (city proper)	Hanover street to Commercial street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	340	253	1905	
Santuit street (Dorchester)	Roseland street to Welles avenue. Topoka. Laid by city force	386	946	1917	
Saratoga street (East Boston)	Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murtfeldt Company	95 {	180 179	1907 1907	
Saratoga street (East Boston)	Metropolitan brick block (in street car tracks)				
Saratoga street (East Boston)	120 feet west of Byron street to Bennington street. Standard asphalt. Laid by Bermudes Company.	2,994	14,500	1918	Unfinished.
Saratoga street (East Boston)	Bridge over Boston, Revere Beach & Lynn Railroad. Mack brick.	89	321	1913	

		100	378	1914	Dec. 21, 1919.
Saratoga street (East Boston).....	West side bridge over Bells Isle inlet to Winthrop line. Metropolitan brick block. Laid by Lawler Brothers.	18	40	1906-07	
Sarsfield street (Roxbury).....	At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company.	10	31	1918	Dec. 24, 1923.
Saunders street (Brighton).....	At North Beacon street. Bitulithic. Laid by Warren Brothers Company..	314	740	1917	Sept. 30, 1922.
Saville street (West Roxbury).....	Stratford street to Park street. Mexican asphalt. Laid by Central Construction Company.	8	25	1910	
Schiller street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	10	28	1913	
School street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry	1	6	1916	
Sears street (city proper).....	At India street. Mexican asphalt. Laid by Central Construction Company.	4,093	15,760	1917	Sept. 17, 1922.
Seaver street (Roxbury).....	Walnut avenue to Blue Hill avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company.	4	28	1913	
Seaverns avenue (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	6	1913	
Sedgwick street (West Roxbury).....	At South street. Bitulithic. Laid by Warren Brothers Company.....	501	826	1910	
Seneca street (city proper).....	4 feet east of Harrison avenue to 3 feet west of Albany street. Mack brick block. Laid by Paving Service.	327	956	1915	
Shawmut avenue (city proper).....	132 feet south of Castle street, across Cherry street. Trinidad asphalt. Laid by Central Construction Company.	9	27	1913	
Shawmut street (city proper).....	At Broadway. Pine wood block. Laid by Coleman Brothers.....	23	104	1915	Sept. 2, 1920.
Sherburn street (Roxbury).....	At Commonwealth avenue. Pine wood block. Laid by Clark & Gore.....	60	263	1918	May 21, 1923.
Sidlaw road (Brighton).....	At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	332	490	1903	
Silver street (South Boston).....	From A street to bridge over New England Railroad. Bitulithic. Laid by Warren Brothers Company.	64	92	1918	
Silver street (South Boston).....	Bridge over New England Railroad. Pine wood block. Laid by Central Construction Company.				

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Silver street (South Boston).....	50 feet west of B street to 10 feet west of B street. Bitulithic. Laid by Warren Brothers Company.	40	59	1903	
Silver street (South Boston).....	B street to C street. Sicilian rock asphalt. Laid by Jones & Meehan.....	512	740	1901	
Silver street (South Boston).....	C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan.....	510	737	1901	
Silver street (South Boston).....	225 feet west of E street to E street. Bitulithic. Laid by Warren Brothers Company.	225	325	1903	
Silver street (South Boston).....	5 feet west of Dorchester street to Dorchester street. Bitulithic. Laid by Warren Brothers Company.	5	8	1905	
Silver street (South Boston).....	Dorchester street to 4 feet east of Dorchester street. Bitulithic. Laid by Warren Brothers Company.	4	6	1905	
Simmons street (Roxbury).....	Vernon street to Linden Park street. Mack brick block. Laid by John E. Burns & Co.	645	1,434	1919	
Smith street (Roxbury).....	St. Alphonsus street to 7 feet west of Phillips street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	576	1,664	1917	
South street (West Roxbury).....	Centre street to 12 feet north of Jamaica street. Bitulithic. Laid by Warren Brothers Company. Pine wood block. (Brows to street car rails.) Laid by Warren Brothers Company.	1,295 {	4,417 280	1913 1913	
South street (West Roxbury).....	12 feet north of Jamaica street to north side Keyes street (east side). Bitulithic. Laid by Warren Brothers Company. Pine wood block. (Brows to street car rails.) Laid by Warren Brothers Company.		200 10	1913 1913	
South street (West Roxbury).....	North side of Keyes street to 25 feet north of Boynton street (east side). Astec asphalt (macadam base). Laid by Bermudes Company.		267	1918	Sept. 28, 1923.
South street (West Roxbury).....	25 feet north of Boynton street to north side of Arborway. Astec asphalt (macadam base). Laid by Bermudes Company.	1,331	3,520	1918	Sept. 28, 1923.

	1917	Nov. 17, 1922.
South street (Brighton).....	1,504	1917
Chestnut Hill avenue to 13 feet east of Commonwealth avenue. Astec asphalt. Laid by Coleman Brothers.	600	
South street (Brighton).....	54	1918
13 feet east of Commonwealth avenue to Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company.	13	
Southern avenue (Dorchester).....	42	1913
At Washington street. Pine wood block. Laid by William J. Barry.....	10	
Southern avenue (Dorchester).....	193	1911
Each side of Talbot avenue. Mack brick block. Laid by James Doherty..	30	
South Margin street (city proper).....	380	1905
2 feet east of Norman street to 7 feet east of Staniford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	187	
Southwick street (Dorchester).....	350	1918
Nonpaset avenue to Freeport street. Mexican asphalt. Laid by Central Construction Company.		
Spaulding street (West Roxbury).....	3	1918
At South street. Astec asphalt (macadam base). Laid by Bermudes Company.	11	
Spear place (city proper).....	9	1913
At Pleasant street. Pine wood block. Laid by Coleman Brothers.....	10	
Spencer street (Dorchester).....	61	1911
At Talbot avenue. Mack brick block. Laid by James Doherty.....	12	
Spoofford road (Brighton).....	47	1917
At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	20	
Spring street (city proper).....	7	1917
Allen street to 3 feet north of Allen street. Mexican asphalt. Laid by Central Construction Company.	3	
Spring street (city proper).....	400	1913
3 feet north of Allen street to Poplar street. Bitulithic. Laid by Warren Brothers Company.	202	
Spring street (city proper).....	425	1895
Poplar street to Chambers street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company.	212	
Spring street (city proper).....	444	1895
Chambers street to Leverett street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company.	216	
Spruce street (city proper).....	11	1917
Beacon street to 11 feet north of Beacon street. Topeka (macadam base). Laid by Bernard E. Grant.		
Stanhope street (city proper).....	15	1907
At Trinity place. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	7	

List of Streets Having a Smooth Pavement — *Continued.*

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Stanton street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	9	54	1914	July 11, 1919.
State street (city proper).....	Washington street to east side of Old State House. Pine wood block. Laid by James Doherty.....	115	521	1908	Dec. 14, 1921.
	Pine wood block. Laid by Bernard E. Grant.....	11	32	1916	
Station street (Roxbury).....	Columbus avenue to Parker street. Bitulithic. Laid by John F. Beatty...	613	1,770	1914	Dec. 18, 1919.
Stevens street (city proper).....	Lincoln place, toward Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	16	22	1897	
Stillman street (city proper).....	Endicott street to North Margin street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company.	135	308	1892	
Stillman street (city proper).....	North Margin street intersection. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	30	70	1895	
Stillman street (city proper).....	At Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	8	7	1901	
Stoddard street (city proper).....	6 feet north of Howard street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	121	135	1892	
Stoughton street (city proper).....	At Albany street. Pine wood block. Laid by Bernard E. Grant.....	12	45	1917	Jan. 19, 1923.
Strathmore road (Brighton).....	At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company.	45	150	1918	May 21, 1923.
Stuart street (city proper).....	At Dartmouth street and at Trinity place. Bitulithic. Laid by James Doherty.	6	26	1912	
Summer street (city proper).....	At Washington street. Mack brick block. Laid by Northern Construction Company.	.....	38	1915	
Summer street (city proper).....	Washington street to west side of South street. Pine wood block. Laid by Northern Construction Company.	1,229	5,688	1915	Aug. 16, 1920.

Sumner street (East Boston).....	Bridge over Boston & Albany Railroad. Laid by W. A. Murtfeldt Company.	38	187	1908
Sun Court street (city proper).....	7 feet north of North street to Moon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	144	211	1891
Talbot avenue (Dorchester).....	At Lithgow street. Mexican asphalt. Laid by Central Construction Company.	.....	30	1917 May 30, 1922.
Talbot avenue (Dorchester).....	66 feet east of Washington street to Washington street. Pine wood block. Laid by William J. Barry.	66	571	1913
Talbot avenue (Dorchester).....	215 feet west of Norfolk street to 58 feet east of Blue Hill avenue. Mack brick block. Laid by James Doherty.	4,300	21,325	1911
Tamworth street (city proper).....	Boylston street to 9 feet south of Boylston street. Pine wood block. Laid by Warren Brothers Company.	9	14	1917 Aug. 15, 1922.
Tanworth street (city proper).....	7 feet north of La Grange street to La Grange street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	7	12	1897
Taylor street (city proper).....	Dwight street to Milford street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	184	257	1896
Temple place (city proper).....	Washington street to 95 feet west of Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	95	318	1906
Temple place (city proper).....	95 feet west of Washington street to 22 feet east of Tremont street. Trinidad land asphalt. Laid by United States Paving Company.	386	1,229	1900
Temple place (city proper).....	22 feet east of Tremont street to Tremont street. Pine wood block. Laid by Coleman Brothers.	22	74	1915 June 20, 1920.
Temple street (West Roxbury).....	Spring street to Ivory street. Mexican asphalt. Laid by Central Construction Company.	1,089	3,169	1917 June 25, 1922.
Tennyson street (city proper).....	At Broadway. Pine wood block. Laid by Coleman Brothers.....	10	30	1913
Tetlow street (Roxbury).....	At Worthington street. Trinidad asphalt. Laid by Central Construction Company.	4	14	1915 Jan. 15, 1921.
Thacher street (city proper).....	12 feet east of Washington Street North to 5 feet east of Endicott street. Mexican asphalt. Laid by Central Construction Company.	187	512	1917

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Thacher street (city proper).....	5 feet east of Endicott street to Endicott street. Laid by Barber Asphalt Paving Company.	5	15	1899	
Theodore street (Dorchester).....	10 feet northeast of Norton street, across Middleton street. Mexican asphalt. Laid by Central Construction Company.	612	1,762	1917	July 26, 1922.
Thetford avenue (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	9	44	1914	July 11, 1919.
Thomas park (South Boston).....	Around Telegraph Hill. Bitulithic. Laid by Warren Brothers Company....	2,056	7,042	1905	
Thomas street (West Roxbury).....	At Centre street. Bitulithic. Laid by Warren Brothers Company.....	2	7	1913	
Tileston street (city proper).....	9 feet north of Hanover street, across Unity street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	403	514	1905	
Tileston street (city proper).....	Unity street to 6 feet south of Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	157	119	1895	
Torrey street (Dorchester).....	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	10	33	1918	Sept. 25, 1923.
Tovar street (Dorchester).....	At Bowdoin street. Topeka (macadam base). Laid by city force.....	3	8	1918	
Treadway road (Dorchester).....	Savin Hill avenue to 87 feet north of Doris street. Astec asphalt. Laid by Central Construction Company.	337	1,261	1916	Nov. 17, 1921.
Tremlett street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	32	1913	
Tremont street (city proper).....	Scollay square to 19 feet north of Boylston street (except next item). Pine wood block. Laid by Coleman Brothers.	2,834	10,625	1915	June 20, 1920.
Tremont street (city proper).....	20 feet north of Winter street, across Temple place (west side). Pine wood block. Laid by United States Wood Preserving Company.	.....	685	1900	
Tremont street (city proper).....	19 feet north of Boylston street to 8 feet north of Eliot at. Pine wood block. Laid by Bernard E. Grant.	453	2,046	1917	Nov. 15, 1922.

			1917	Nov. 15, 1922.
Tremont street (city proper).....	8 feet south of Eliot street to 21 feet south of the north side of Common street. Pine wood block. Laid by Bernard E. Grant.	424	1,884	
Tremont street (city proper).....	Bridge over Boston & Albany Railroad. Standard asphalt. Laid by Boston & Albany Railroad Company.....	65	190 128	1912 1912
Tremont street (city proper).....	Portland stone brick. Laid by Boston & Albany Railroad Company.....			
Tremont street (city proper).....	See Arlington square.			
Tremont street (Roxbury).....	St. Alphonsus street to Phillips street. Bitulithic. Laid by Warren Brothers Company.	587	1,854	1902
Trent street (Dorchester).....	Clarkson street to 6 feet north of Coleman street. Trinidad asphalt. Laid by William J. Rafferty & Co.	222	498	1915
Trescott street (Dorchester).....	Pleasant street to Bakersfield street. Bitulithic. Laid by James Doherty....	384	1,111	1914
Trinity place (city proper).....	Huntington avenue to St. James avenue. Bitulithic. Laid by James Doherty.	124	346	1912
Trinity place (city proper).....	St. James avenue, across Stuart street. Bitulithic. Laid by James Doherty,	384	1,503	1912
Trinity place (city proper).....	Stuart street to 5 feet south of Stuart street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	5	14	1899
Trinity place (city proper).....	5 feet south of Stuart street, across Stanhope street. Trinidad asphalt. (East side.) Laid by Barber Asphalt Paving Company.....	262	408 349	1907 1900
Trinity place (city proper).....	(West side.) Laid by Barber Asphalt Paving Company.....			
Trull street (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	29	1910
Tuckerman street (South Boston).....	Dorchester street to Middle street. Aztec asphalt. Laid by Central Con- struction Company.	367	764	1916
Tudor street (South Boston).....	C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan.....	506	731	1901
Tudor street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	4	6	1905
Tufts street (city proper).....	8 feet west of South street to 7 feet east of Lincoln street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	212	473	1901
Tufts street (city proper).....	8 feet west of Lincoln street to 13 feet east of Kingston street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	239	527	1901

List of Streets Having a Smooth Pavement — *Continued.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Tufta street (city proper).....	13 feet east of Kingston street to Kingston street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	13	33	1910	
Tufta street (Charlestown).....	Bunker Hill street to 141 feet north of Bunker Hill street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	141	415	1897	
Turner street (Brighton).....	Washington street to Faneuil street. Aztec asphalt. Laid by Coleman Brothers.	1,253	2,920	1917	Sept. 17, 1922.
Tyler street (city proper).....	6 feet south of Beach street to 8 feet north of Kneeland street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	306	815	1917	
Tyler street (city proper).....	Kneeland street to Harvard street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	319	850	1917	
Tyler street (city proper).....	Harvard street to Oak street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	518	1,381	1901	
Tyler street (city proper).....	7 feet south of Oak street to 6 feet north of Curve street. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	428	1,152	1905	
Union Park street (city proper).....	Washington street to Harrison avenue. Acme asphalt. Laid by Fred S. & A. D. Gore Corporation..... Standard asphalt. Laid by Central Construction Company.	461 {	1,719 685	1913 1916	
Unity street (city proper).....	Charter street to Tileston street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	330	500	1897	
Upham avenue (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	30	1911	
Upland avenue (Dorchester).....	Park street to Melville avenue. Aztec asphalt. Laid by Central Construction Company.	748	2,509	1916	Nov. 28, 1921.
Utica street (city proper).....	At Tufts street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	3	5	1901	

Vernon street (Roxbury).....	Tremont street to Cabot street. Mack brick block. Laid by J. E. Burns & Co.	798	2,307	1909
Vernon street (Roxbury).....	80 feet east of Cabot street to 7 feet east of Auburn street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	694	1,788	1907
Vernon street (Roxbury).....	Shawmut avenue to Washington street. Pine wood block. Laid by Boston Paving Company.	281	814	1913
Victory road (Dorchester).....	At Neponset avenue. Topeka (macadam base). Laid by city force.....	7	23	1918
Vine street (Roxbury).....	At Dudley street. Mack brick block. Laid by James Doherty.....	7	20	1910
Vine street (Charlestown).....	Bunker Hill street, across Moulton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	165	670	1897
Walden street (Roxbury).....	At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	18	1910
Waldo terrace (Brighton).....	Washington street to 1 foot north of Washington street. Bitulithic. Laid by Warren Brothers Company.	1	2	1913
Waldo terrace (Brighton).....	1 foot north of Washington street to Henshaw street. Astec asphalt. Laid by Coleman Brothers.	291	406	1917
Wales street (Dorchester).....	At Talbot avenue. Mack brick block. Laid by James Doherty.....	15	82	1911
Walk Hill street (Dorchester).....	Blue Hill avenue to 25 feet north of Norfolk street. Bitulithic (macadam base). Laid by Warren Brothers Company.	201	653	1918
Walk Hill street (Dorchester).....	25 feet north of Norfolk street to Norfolk street. Bitulithic. Laid by Warren Brothers Company.	25	150	1918
Walnut avenue (Roxbury and West Roxbury).....	20 feet north of Columbus avenue to 13 feet south of Columbus avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company.	68	214	1917
Walnut street (city proper).....	Beacon street to 12 feet north of Beacon street. Topeka (macadam base). Laid by Bernard E. Grant.	12	21	1917
Walpole street (Roxbury).....	At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company.	18	46	1906-07
Walton street (Dorchester).....	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	10	30	1918
				Sept. 25, 1923.

List of Streets Having a Smooth Pavement — Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Warren avenue (city proper).....	Berkeley street to 4 feet west of Berkeley street. Bitulithic. Laid by Warren Brothers Company.	4	25	1906	
Warren avenue (city proper).....	4 feet west of Berkeley street to 4 feet east of Pembroke street. Pine wood block. Laid by Boston Paving Company.	2,046	12,217	1913	
Warren street (Roxbury).....	At Washington street. Pine wood block. Laid by James Doherty.....	10	73	1911	
Warren street (Roxbury).....	At Dudley street. Pine wood block. Laid by James Doherty.....	23	216	1912	
Warren street (Charlestown).....	Winthrop street, across Soley street. Mexican asphalt. Laid by Central Construction Company.	128	302	1917	
Warrenton street (city proper).....	8 feet south of Eliot street to 392 feet south of Eliot street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	384	1,045	1891	
Warrenton street (city proper).....	392 feet south of Eliot street to 9 feet north of Tremont street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	269	630	1884	
Warrenton street (city proper).....	13 feet south of Shawmut avenue to Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	464	928	1891	
Warwick street (Roxbury).....	At Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	6	18	1907	
Washington street (Charlestown).....	At Harvard street. Astec asphalt (macadam base). Laid by Bermudez Company.	8	15	1918	June 8, 1923.
Washington street North (Charlestown).....	Bridge over Boston & Maine Railroad, Fitchburg Division. Trinidad asphalt. Laid by Simpson Brothers Corporation.	61	543	1899	
Washington street (city proper).....	8 feet south of Cornhill to 78 feet south of Court avenue. Pine wood block. Laid by James Doherty.	509	1,475	1908	
Washington street (city proper).....	78 feet south of Court avenue to 5 feet south of Milk street. Black gum wood block. Laid by United States Wood Preserving Company. Pine wood block. Laid by Bernard E. Grant.....	538	218 1,642	1907 1917	Nov. 4, 1922.

Washington street (city proper).....	5 feet south of Milk street to 57 feet north of Essex street. Black gum wood block. Laid by United States Wood Preserving Company. Pine wood block. Laid by Bernard E. Grant.	1,341 6,449	1906 1917	Nov. 4, 1922.
Washington street (city proper).....	57 feet north of Essex street to 54 feet south of Boylston street. Pine wood block. Laid by Bernard E. Grant.	213 360	1917	Nov. 4, 1922.
Washington street (city proper).....	54 feet south of Boylston street to 7 feet north of Beach street. Pine wood block. Laid by Bernard E. Grant.	133 505	1917	Nov. 4, 1922.
Washington street (city proper).....	At Pleasant street. Pine wood block. Laid by Coleman Brothers.	20	1913	
Washington street (city proper).....	Bridge over Boston & Albany Railroad. Metropolitan brick. Laid by W. A. Murfeldt Company.	60 216	1908	
Washington street (Roxbury).....	Williams street to 27 feet north of Marvin street. Pine wood block. Laid by James Doherty.	1,026 4,779	1911	
Washington street (Roxbury).....	27 feet north of Marvin street, across Zeigler street (west side). Trinidad asphalt. Laid by Barber Asphalt Paving Company.	210	1904	
Washington street (Roxbury).....	Zeigler street to 20 feet north of Dudley street. Pine wood block. Laid by James Doherty.	186 745	1911	
Washington street (Roxbury).....	20 feet north of Dudley street to Dudley street. Pine wood block. Laid by James Doherty.	20 105	1912	
Washington street (Roxbury).....	Dudley street to 130 feet south of Dudley street. Pine wood block. Laid by James Doherty.	130 930	1912	
Washington street (West Roxbury).....	La Grange street southerly. Topoka (macadam base). East roadway. Maintained by Massachusetts Highway Commission. West roadway. Maintained by Massachusetts Highway Commission.	9,824 5,491	1916 1916	
Washington street (West Roxbury).....	29 feet south of Grove street to 529 feet south of Grove street (east roadway). Concrete road. Maintained by Massachusetts Highway Commission.	500 1,055	1916	
Washington street (Roxbury and Dor- chester).....	Blue Hill avenue to 16 feet south of Fenelon street, and from Eldon street to 42 feet south of Bowdoin street. Pine wood block. Laid by William J. Barry.	4,010 18,023	1912-13	
Washington street (Dorchester).....	42 feet south of Bowdoin street, across Talbot avenue. Pine wood block. Laid by William J. Barry.	3,440 16,402	1913	

List of Streets Having a Smooth Pavement.—Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires
Washington street (Dorchester).....	55 feet south of Talbot avenue to north side of Ashmont street. Topeka (macadam base). Laid by Warren Brothers Company.	1,685	5,042	1918	Sept. 25, 1923.
Washington street (Dorchester).....	North side of Ashmont street to 85 feet north of Armandine street (west side). Topeka (macadam base). Laid by Warren Brothers Company.	.....	314	1918	Sept. 25, 1923.
Washington street (Dorchester).....	85 feet north of Armandine street to 12 feet south of Armandine street. Topeka (macadam base). Laid by Warren Brothers Company.	123	325	1918	Sept. 25, 1923.
Washington street (Brighton).....	Cambridge street to 126 feet west of Chestnut Hill avenue. Bitulithic. Laid by Warren Brothers Company. Pine wood block. (Brows to street car rails.) Laid by Warren Brothers Company.	1,021 {	5,030 217	1913 1913	
Water street (city proper).....	2 feet west of Devonshire street to Devonshire street. Pine wood block. Laid by Bernard E. Grant.	2	6	1916	Dec. 14, 1921.
Water street (city proper).....	Devonshire street to 7 feet east of Devonshire street. Pine wood block. Laid by Bernard E. Grant.	7	33	1916	Dec. 14, 1921.
Water street (city proper).....	7 feet east of Devonshire street to 8 feet west of Congress street. Black gum wood block. Laid by United States Wood Preserving Company.	198	885	1907	
Water street (city proper).....	7 feet east of Congress street to Kilby street. Residual asphalt. Laid by Central Construction Company.	249	690	1915	
Water street (city proper).....	Liberty square to 19 feet east of Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	19	46	1896	
Water street (city proper).....	19 feet east of Liberty square to 8 feet west of Broad street. Residual asphalt. Laid by Central Construction Company.	225	614	1915	
Waterford street (city proper).....	8 feet west of Washington street to 1 foot east of Shawmut avenue. Seymsel rock asphalt. Laid by Jones & Meehan.	307	529	1897	
Welles avenue (Dorchester).....	At Washington street. Topeka (macadam base). Laid by Warren Brothers Company.	50	200	1918	Sept. 25, 1923.

At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07
At Heath street. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	53	1910
At Norfolk street. Bitulithic. Laid by James Doherty.	1	4	1913
Washington street to 8 feet west of Washington street. Mack brick block.	8	20	1908
8 feet west of Washington street to 22 feet east of Tremont street. Black gum wood block. Laid by United States Wood Preserving Company.	403	1,128	1908
22 feet east of Tremont street to Tremont street. Pine wood block. Laid by Coleman Brothers.	22	64	1915
204 feet east of Dorchester avenue to 8 feet west of A street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	348 {	666 612	1892 1917
Acme asphalt. Laid by Warren Brothers Company.			
8 feet west of A street to west side bridge over New England Division, New York, New Haven & Hartford Railroad.	378 {	1,215 192	1917 1917
Acme asphalt. Laid by Warren Brothers Company.			
Bessemer brick block gutters. Laid by Warren Brothers Company.			
36 feet east of bridge over New England Division, New York, New Haven & Hartford Railroad to 148 feet west of F street.	2,153 {	7,438 857	1917 1917
Acme asphalt. Laid by Warren Brothers Company.			
Bessemer brick block gutters. Laid by Warren Brothers Company.			
148 feet west of F street to 267 feet east of F street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	446	1,537	1897
267 feet east of F street to 28 feet west of Dorchester street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	410	1,246	1898
28 feet west of Dorchester street (south) to west side of Dorchester street (north). Bitulithic. Laid by Warren Brothers Company.	.....	162	1905
At Warren avenue. Pine wood block. Laid by Boston Paving Company.	4	16	1913
At Saratoga street. Standard asphalt. Laid by Bermudes Company.	8	32	1918

List of Streets Having a Smooth Pavement.—Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
West Canton street (city proper).....	13 feet west of Tremont street to 4 feet east of Warren avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	585	1,846 320	1916 1916	Oct. 21, 1921. Oct. 21, 1921.
West Canton street (city proper).....	4 feet east of Warren avenue to Warren avenue. Pine wood block. Laid by Boston Paving Company.	4	18	1913	
West Canton street (city proper).....	Warren avenue to 4 feet west of Warren avenue. Pine wood block. Laid by Boston Paving Company.	4	18	1913	
West Canton street (city proper).....	4 feet west of Warren avenue to 2 feet east of Appleton street. Acme asphalt (macadam base). Laid by Warren Brothers Company..... Bessemer brick block gutters. Laid by Warren Brothers Company.....	257	828 145	1916 1916	Oct. 21, 1921. Oct. 21, 1921.
West Canton street (city proper).....	2 feet east of Appleton street to Appleton street. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.	2	11	1912	
West Canton street (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07	
Westcott street (Dorchester).....	At Talbot avenue. Mack brick block. Laid by James Doherty.....	12	60	1911	
West Fifth street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	4	15	1905	
West Fourth street (South Boston).....	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	3	19	1905	
West Fourth street (South Boston).....	2 feet east of E street to E street. Bitulithic. Laid by Warren Brothers Company.	2	7	1903	
West Fourth street (South Boston).....	E street to 207 feet west of E street. Bitulithic. Laid by Warren Brothers Company.	207	759	1903	
Westland avenue (Roxbury).....	At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	1	9	1901	
Westminster street (Roxbury).....	At Hammond street. Pine wood block. Laid by Fred S. & A. D. Gore Corporation.	23	120	1912	

Westminster street (Roxbury).....	At Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	6	17	1907
West Newton street (city proper).....	13 feet west of Tremont street to 13 feet east of Columbus avenue. Bitulithic. Laid by Warren Brothers Company.	766	3,083	1904
West Newton street (city proper).....	13 feet east of Columbus avenue to Columbus avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation.	13	97	1912
West Newton street (city proper).....	Columbus avenue to 4 feet south of Huntington avenue (not including New York, New Haven & Hartford Railroad Bridge). Bitulithic. Laid by Central Construction Company.	1,040	3,932	1917
West Newton street (city proper).....	4 feet south of Huntington avenue to Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	4	19	1896
West Newton street (city proper).....	Huntington avenue to 4 feet north of Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company.	4	19	1896
West Newton street (city proper).....	4 feet north of Huntington avenue to 11 feet north of Huntington avenue. Mexican asphalt (crushed stone base). Laid by Central Construction Company.	7	26	1917
West Newton street (city proper).....	11 feet north of Huntington avenue, across Belvidere street. Bitulithic. Laid by Warren Brothers Company.	239	903	1903
Weston street (Roxbury).....	At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company.	9	20	1906-07
West Rutland square (city proper).....	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07
West Seventh street (South Boston)...	At Dorchester street. Bitulithic. Laid by Warren Brothers Company.....	4	16	1905
West Sixth street (South Boston).....	At Dorchester avenue. Bitulithic. Laid by Warren Brothers Company...	4	18	1905
West Sixth street (South Boston).....	C street to D street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	503	1,490	1905
West Springfield street (city proper)...	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07
West Third street (South Boston).....	153 feet west of E street to 2 feet east of E street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	187	702	1892

List of Streets Having a Smooth Pavement.—Continued.

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
West Tremlett street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	24	1913	
Westwood street (Dorchester).....	Richfield street to the south street line of Wales place. Mexican asphalt. Laid by Central Construction Company.	581	1,755	1917	June 1, 1922.
Wharf street (city proper).....	At India street. Mexican asphalt. Laid by Central Construction Com- pany.	1	4	1917	
Wheatland avenue (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	38	1913	
Wheeler street (city proper).....	Shawmut avenue to Corning street. Acme asphalt. Laid by Warren Brothers Company.	360	585	1909	
Whitfield street (Dorchester).....	13 feet north of Talbot avenue to Talbot avenue. Mack brick block. Laid by James Doherty.	13	60	1911	
Whitfield street (Dorchester).....	Talbot avenue to 13 feet south of Talbot avenue. Mack brick block. Laid by James Doherty.	13	57	1911	
Whitfield street (Dorchester).....	13 feet south of Talbot avenue to 6 feet north of Southern avenue. Trinidad asphalt. Laid by Central Construction Company.	88	265	1914	Dec. 10, 1919.
Whitfield street (Dorchester).....	9 feet south of Southern avenue to 2 feet north of Norfolk street. Trinidad asphalt. Laid by Central Construction Company.	414	1,212	1914	Dec. 10, 1919.
Whitfield street (Dorchester).....	2 feet north of Norfolk street to Norfolk street. Bitulithic. Laid by James Doherty.	2	7	1914	July 11, 1919.
Whitman street (Dorchester).....	At Norfolk street. Bitulithic. Laid by James Doherty.....	1	4	1913	July 11, 1919.
Whitmore street (city proper).....	8 feet south of Kneeland street to 6 feet north of Harvard street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	235	417	1895	
Whitmore street (city proper).....	6 feet north of Harvard street to Harvard street. Pine wood block. Laid by J. H. McCarthy.	6	10	1910	

Whitmore terrace (Dorchester).....	At Hancock street. Mack brick block. Laid by Central Construction Company.	10	26	1910	
Whittier street (Roxbury).....	Cabot street to Tremont street. Mack brick block. Laid by John E. Burns & Co.	636	1,874	1909	
Whittier street (Roxbury).....	Tremont street to 5 feet east of Columbus avenue. Mack brick block. Laid by John E. Burns & Co.	207	782	1909	
Whittier street (Roxbury).....	5 feet east of Columbus avenue to Columbus avenue. Bernudez asphalt. Laid by Boston Asphalt Company.	5	25	1908-07	
Wiget street (city proper).....	Salem street to 6 feet west of Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company.	6	7	1901	
Wiget street (city proper).....	6 feet west of Salem street to North Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	253	233	1897	
Wiggen street (city proper).....	North Bannet street to Tileston street. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	108	120	1905	
Wigglesworth street (Roxbury).....	At Longwood avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	23	1910	
Wilder street (Dorchester).....	At Washington street. Pine wood block. Laid by William J. Barry.....	10	30	1912	
Willowwood street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....	8	25	1918	Nov. 4, 1923.
Wilmore street (Dorchester).....	At Norfolk street. Bitulithic. Laid by Warren Brothers Company.....	11	40	1918	Nov. 4, 1923.
Winchester street (city proper).....	At Broadway. Pine wood block. Laid by Coleman Brothers.....	10	28	1913	
Winship street (Brighton).....	At Washington street. Bitulithic. Laid by Warren Brothers Company...	18	140	1913	
Winlow street (Roxbury).....	At Zeigler street. Bitulithic. Laid by John F. Beatty.....	1	3	1914	Aug. 31, 1919.
Winlow street (Roxbury).....	At Dudley street. Mack brick block. Laid by James Doherty.....	8	23	1910	
Winter street (city proper).....	Washington street to 10 feet east of Tremont street. Bitulithic. Laid by Warren Brothers Company.	505	1,122	1913	
Winter street (city proper).....	10 feet east of Tremont street to Tremont street. Pine wood block. Laid by Coleman Brothers.	10	31	1915	June 20, 1920.

List of Streets Having a Smooth Pavement — *Concluded.*

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Winter street (Dorchester)	At Bowdoin street. Mack brick block. Laid by Central Construction Com- pany.	9	45	1913	
Winthrop street (East Boston)	At Maverick square. Askes asphalt. Laid by Bermudes Company	9	17	1917	Dec. 15, 1922.
Wirt street (Brighton)	At Washington street. Bitulithic. Laid by Warren Brothers Company ..	12	212	1913	
Withington street (Dorchester)	At Norfolk street. Bitulithic. Laid by James Doherty	1	4	1913	July 11, 1919.
Woodcliff street (Roxbury)	Dacia street to Blue Hill avenue. Bitulithic. Laid by Warren Brothers Company.	310	896	1906	
Woolson street (Dorchester)	At Norfolk street. Bitulithic. Laid by Warren Brothers Company	8	25	1918	Nov. 4, 1923.
Worcester street (city proper)	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906-07	
Wordworth street (East Boston)	Coleridge street to 70 feet north of Cowper street. Mexican asphalt. Laid by Central Construction Company.	316	1,040	1917	Aug. 6, 1922.
Wordworth street (East Boston)	45 feet south of Homer street to 9 feet north of Horace street. Mexican asphalt. Laid by Central Construction Company.	335	1,186	1917	Aug. 6, 1922.
Wordworth street (East Boston)	8 feet south of Saratoga street to Saratoga street. Standard asphalt. Laid by Bermudes Company.	8	32	1918	Unfinished.
Wordworth street (East Boston)	Saratoga street to 11 feet west of Saratoga street. Standard asphalt. Laid by Bermudes Company.	11	53	1918	Unfinished.
Worthington street (Roxbury)	8 feet south of Longwood avenue to Longwood avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	23	1910	
Worthington street (Roxbury)	Longwood avenue to 8 feet north of Longwood avenue. Mack brick block. Laid by Field, Barker & Underwood, Inc.	8	26	1910	
Worthington street (Roxbury)	8 feet north of Longwood avenue to street No. 220. Trinidad asphalt. Laid by Central Construction Company.	828	2,395	1915	Jan. 15, 1921.

	At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company.	9	34	1906
Yarmouth street (city proper)				
Zeigler street (Roxbury)	7 feet east of Washington street to Warren street. Granitoid concrete block pavement. Laid by R. S. Blome Company.	315	946	1908
Zeigler street (Roxbury)	Warren street to Harrison avenue. Bitulithic. Laid by John F. Beatty...	177	380	1914
Zeigler street (Roxbury)	8 feet east of Harrison avenue to 9 feet west of Dearborn street. Bitulithic. Laid by John F. Beatty.	866	1,864	1914
Zeigler street (Roxbury)	9 feet west of Dearborn street to Dearborn street. Acme asphalt. Laid by Warren Brothers Company. Besemer brick block gutters. Laid by Warren Brothers Company.	9 {	15 5	1917 1917

TOTALS OF SMOOTH PAVEMENT STREETS, FEBRUARY 1, 1919.
Asphalt.

KIND.	UNDER GUARANTY.		NOT UNDER GUARANTY.		TOTALS.	
	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.
Trinidad.....	18,847	53,581	54,343	146,541	73,190	200,122
Sicilian rock.....	.....	.....	32,587	88,439	32,587	88,439
Seyssel rock.....	.....	.....	2,470	4,053	2,470	4,053
American rock.....	.....	.....	1,564	5,811	1,564	5,811
Limmer rock.....	.....	.....	38	187	38	187
Limmer rock and Acme.....	.....	.....	164	455	164	455
Acme.....	13,433	46,004	6,422	17,547	19,855	63,551
Bermudes.....	.....	.....	4,018	16,060	4,018	16,060
Residual.....	.....	.....	1,272	3,810	1,272	3,810
Standard.....	3,115	15,089	110	1,870	3,225	16,959
Standard and Astec.....	.....	.....	457	1,767	457	1,767
Astec and Trinidad.....	589	1,489	.....	.....	589	1,489
Astec.....	17,915	62,051	571	1,307	18,486	63,358
Mexican.....	23,136	130,695	9,130	24,676	32,266	155,371
Total asphalt.....	77,035	308,909	113,146	312,523	190,181	621,432

Wood Block.

KIND.	UNDER GUARANTY.		NOT UNDER GUARANTY.		TOTALS.	
	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.
Pine.....	19,450	92,517	30,576	136,858	50,026	229,375
Black gum.....			1,160	9,357	1,160	9,357
W and A composite, wood and asphalt.....			319	1,418	319	1,418
Jennison Wright slab wood pavement.....			125	611	125	611
Total, wood block.....	19,450	92,517	32,180	148,244	51,630	240,761

Brick Block.

KIND.	UNDER GUARANTY.		NOT UNDER GUARANTY.		TOTALS.	
	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.
Mack.....		163	24,583	96,246	24,583	96,409
Barrington.....	552	483	14	65	566	558
Metropolitan.....	100	378	469	2,094	569	2,472
Vitrified.....			12	11	12	11
Canton block.....			643	1,789	643	1,789
Bessemer.....	537	6,619	1,516	6,849	2,053	13,468
Portland stone.....				128		128
Total, brick block.....	1,189	7,653	27,237	107,182	28,426	114,835

SUMMARIES OF SMOOTH PAVEMENT STREETS, FEBRUARY 1, 1919.

KIND.	UNDER GUARANTY.		NOT UNDER GUARANTY.		TOTALS.	
	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.	Length, Feet.	Area, Square Yards.
Asphalt.....	77,035	308,909	113,146	312,523	190,181	621,432
Asphalt block.....			98	774	98	774
Bitulithic.....	53,481	216,903	32,727	122,814	86,208	339,717
Topeka.....	11,610	36,829	1,782	9,562	13,392	46,391
Endurite.....			10	1,614	10	1,614
Filbertine.....	326	959			326	959
Granitoid concrete blocked pavement.....			315	946	315	946
Concrete road.....	901	1,510	8,062	21,684	8,963	23,194
Roman road.....	433	1,250			433	1,250
Haasam pavement.....			139	672	139	672
Wood block.....	19,450	92,517	32,180	148,244	51,630	240,761
Brick block.....	1,189	7,653	27,237	107,182	28,426	114,835
Scoria block.....			322	254	322	254
Total of all smooth pavements.....	164,425	666,530	216,018	726,269	380,443	1,392,799

LIST OF STREETS PAVED WITH GRANITE BLOCKS HAVING A MAINTENANCE QUARANTY.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Quaranty Expires.
A street (South Boston)	7 feet west of Gold street to Dorchester avenue. Laid by Central Construction Company.	54	209	1918	Nov. 9, 1920.
Albany street (city proper)	Kneeland street to Boston & Albany Railroad Bridge. Laid by Coleman Brothers.	1,272	5,828	1918	Aug. 13, 1923.
Albany street (city proper)	Dover street to 7 feet north of Stoughton street. Laid by Bernard E. Grant.	3,577	22,144	1917	Jan. 21, 1923.
Alden street (city proper)	At Sudbury street. Laid by Simpson Brothers Corporation	60	154	1918	Sept. 6, 1923.
Atlantic avenue (city proper)	South street line of Kneeland street to 91 feet south of Summer street. Laid by Coleman Brothers.	1,153	8,790	1918	Nov. 2, 1923.
Atlantic avenue (city proper)	(West side) 67 feet north of Summer street to Oliver street. Laid by Bernard E. Grant.	1,183	4,187	1918	Unfinished.
Atlantic avenue (city proper)	Broad street to south side of South Market street. Laid by Rossetti & Co.	1,284	11,179	1918	Jan. 17, 1924.
Atlantic avenue (city proper)	South side of South Market street to Commercial street. Laid by D'Onfro Brothers.	1,270	6,286	1918	Unfinished.
Amory street (Roxbury)	Centre street to 10 feet north of Bragdon street. Laid by James Doherty	1,398	5,525	1917	June 1, 1922.
Battery march street (city proper)	2 feet west of Broad street to 93 feet west of Broad street. Laid by Bernard E. Grant.	91	282	1916	Oct. 20, 1921.
Battery march street (city proper)	Angle to Franklin street. Laid by Bernard E. Grant	197	808	1916	Oct. 20, 1921.
Beach street (city proper)	Harrison avenue to Atlantic avenue. Laid by Bernard E. Grant	1,264	4,811	1917	Aug. 6, 1922.
Beacon street (city proper)	12 feet west of Tremont street to 21 feet west of Park street. Laid by Bernard E. Grant.	827	2,318	1917	Oct. 21, 1922.

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.—Continued.

Streets.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Beacon street (city proper).....	21 feet west of Park street to Charles street (gutters). Laid by Bernard E. Grant.	.....	1,125	1917	Nov. 15, 1922.
Boston street (South Boston).....	Andrew square to bridge over New York, New Haven & Hartford Railroad. Laid by Central Construction Company.	644	2,930	1918	Sept. 5, 1920.
Bowker street (city proper).....	At Sudbury street. Laid by Simpson Brothers Corporation.....	57	215	1918	Sept. 6, 1923.
Broadway (city proper).....	Washington street to Harrison avenue. Laid by James Doherty.....	385	1,750	1918	Oct. 5, 1923.
Broadway (city proper).....	Harrison avenue to Boston & Albany Railroad Bridge. Laid by James Doherty.	230	1,120	1918	Oct. 5, 1923.
Canal street (city proper).....	Haymarket square to Causeway street. Laid by Bernard E. Grant.....	1,060	5,493	1917	July 9, 1922.
Central street (city proper).....	At Atlantic avenue. Laid by Rosetti & Co.....	52	277	1918	Jan. 17, 1924.
Clinton street (city proper).....	Merchants row, across Commercial street. Laid by Coleman Brothers.....	593	2,589	1918	July 27, 1923.
Columbia road (Dorchester).....	8 feet north of Dudley street to 52 feet south of East Cottage street. Laid by Bernard E. Grant.	1,461	4,630	1916	Nov. 18, 1921.
Commerces street (city proper).....	At Atlantic avenue. Laid by Rosetti & Co.....	39	173	1918	Jan. 17, 1924.
Commercial street (city proper).....	Hanover street, across Hull street (west side). Laid by Bernard E. Grant.....	1,453	1,609	1918	Unfinished.
Commercial street (city proper).....	Hull street to Prince street. Laid by Bernard E. Grant.....	234	1,178	1918	Unfinished.
Congress street (city proper).....	Atlantic avenue to Harbor line. Laid by John E. Quinn.....	611	4,084	1918	Aug. 28, 1923.
Cross street (city proper).....	Commercial street to 9 feet east of North street. Laid by Coleman Brothers.	467	998	1918	July 28, 1923.
Cross street (city proper).....	3 feet west of North street to 4 feet east of Hanover street. Laid by Coleman Brothers.	287	627	1918	July 28, 1923.
Cross street (city proper).....	4 feet west of Hanover street to 2 feet east of Endicott street. Laid by Coleman Brothers.	439	781	1918	July 28, 1923.

Cross street (city proper).....	1 foot west of Esdicoit street to 9 feet east of Haymarket square. Laid by Coleman Brothers.	195	585	1918	July 28, 1923.
Dartmouth street (city proper).....	Tramont street to 4 feet south of Warren avenue. Laid by James Doherty.	502	2,240	1918	Oct. 26, 1923.
Dartmouth street (city proper).....	4 feet north of Warren avenue to Columbus avenue. Laid by James Doherty.	536	2,381	1918	Oct. 26, 1923.
Dartmouth street (city proper).....	10 feet north of Columbus avenue to bridge over New York, New Haven & Hartford Railroad. Laid by James Doherty.	464	1,490	1918	Oct. 26, 1923.
Dartmouth street (city proper).....	Bridge over Boston & Albany Railroad to 3 feet south of Stuart street. Laid by James Doherty.	131	482	1918	Oct. 26, 1923.
Devonshire street (city proper).....	Dock square to 75 feet south of Dock square. Laid by Bernard E. Grant.	75	117	1916	Dec. 4, 1921.
Dorchester avenue (city proper).....	Congress street to Summer street. Laid by John E. Quinn.	316	2,107	1918	Aug. 26, 1923.
Dorchester avenue (South Boston).....	3 feet south of West Second street to bridge over New York, New Haven & Hartford Railroad, New England Division. Laid by Central Construction Company.	1,639	8,433	1918	Nov. 9, 1920.
Dorchester avenue (South Boston).....	Bridge over New York, New Haven & Hartford Railroad, New England Division, to 7 feet south of Old Colony avenue. Laid by Central Construction Company.	443	1,858	1918	Nov. 9, 1920.
Dorchester avenue (South Boston).....	128 feet north of Leeds street to 176 feet north of Hyde street. Laid by Central Construction Company.	618	2,748	1918	Sept. 5, 1920.
Dorchester avenue (Dorchester).....	8 feet south of Savin Hill avenue to 52 feet north of East street. Laid by Bernard E. Grant.	1,895	8,422	1917	Nov. 17, 1922.
Dorchester avenue (Dorchester).....	52 feet north of East street to 148 feet south of Charles street. West side. Laid by Bernard E. Grant.	2,742 {	4,125	1917	Dec. 18, 1922.
Dorchester avenue (Dorchester).....	East side and between tracks. Laid by James Doherty.		7,408	1918	Dec. 1, 1923.
Dorchester avenue (Dorchester).....	148 feet south of Charles street to 45 feet south of Park street. Laid by James Doherty.	691	2,884	1918	Dec. 19, 1923.
Dorchester avenue (Dorchester).....	South side of bridge over New York, New Haven & Hartford Railroad (Passady square) to 113 feet south of Bellow place. Laid by James Doherty.	3,934	16,610	1917-18	June 4, 1923.
Dorchester avenue (Dorchester).....	2 feet north of Richmond street to Washington street. Laid by James Doherty.	609	2,304	1917-18	June 4, 1923.

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.—Continued.

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Dorchester street (South Boston).....	At Dorchester avenue. Laid by Central Construction Company.....	32	220	1918	Sept. 5, 1920.
Freeport street (Dorchester).....	At Dorchester avenue. Laid by James Doherty.....	51	280	1918	Dec. 1, 1923.
Hanover street (city proper).....	Washington street to 5 feet east of Friend street. Laid by Bernard E. Grant,	45	264	1917	Sept. 24, 1922.
Harrison avenue (city proper).....	22 feet north of Harvard street to bridge over Boston & Albany Railroad, Laid by Coleman Brothers.	1,180	4,172	1918	June 19, 1923.
Harrison avenue (city proper).....	Bridge over New York, New Haven & Hartford Railroad, across Asylum street. Laid by Bernard E. Grant.	367	1,362	1917	Dec. 17, 1922.
Harrison avenue (city proper).....	Asylum street, across Davis street (at street car tracks). Laid by Bernard E. Grant.	.....	295	1917	Dec. 17, 1922.
Harrison avenue (city proper).....	Davis street to 2 feet north of Decatur street. Laid by Bernard E. Grant.	256	960	1917	Dec. 17, 1922.
Harrison avenue (city proper).....	2 feet north of Decatur street, across Gloucester place (at street car tracks). Laid by Bernard E. Grant.	.....	262	1917	Dec. 17, 1922.
Harrison avenue (city proper).....	Gloucester place to 5 feet north of Dover street. Laid by Bernard E. Grant.	165	607	1917	Dec. 17, 1922.
Hawkins street (city proper).....	Sudbury street to Chardon street. Laid by Simpson Brothers Corporation.	444	904	1918	Sept. 6, 1923.
Haymarket square (city proper).....	Laid by Bernard E. Grant.....	496	6,708	1917	Sept. 15, 1922.
India street (city proper).....	State street to 9 feet east of Milk street. Laid by Bernard E. Grant.....	381	4,430	1917	June 19, 1922.
India street (city proper).....	Angle near Export street to Atlantic avenue. Laid by Rosetti & Co.	136	520	1918	Jan. 17, 1924.
Lincoln street (city proper).....	Essex street to Beach street. Laid by Bernard E. Grant.....	505	2,442	1917	July 29, 1922.
Macallen street (South Boston).....	At Dorchester avenue. Laid by Central Construction Company.....	27	102	1918	Nov. 20, 1920.
Mercantile street (city proper).....	South Market street to Clinton street. Laid by Coleman Brothers.....	185	620	1918	June 29, 1923.
Mercantile street (city proper).....	Clinton street to Richmond street. Laid by Coleman Brothers.....	360	1,971	1918	June 29, 1923.

Neponset avenue (Dorchester)	345	1,147	1917	April 26, 1923.
South side Holbrook street to tangent north side of Chickatawbut street (east side and tracks). Laid by John F. Lynch.				
Neponset avenue (Dorchester)	1,336	8,623	1917-18	April 26, 1923.
Tangent north side of Chickatawbut street to 25 feet south of Ashmont street. Laid by John F. Lynch.				
Overland street (Roxbury)	399	1,687	1917-18	Aug. 1, 1923.
Brookline avenue to Boston & Albany Railroad. Laid by James F. Coughlan Company.				
Park street (city proper)	152	728	1918	July 14, 1923.
Beacon street to 152 feet south of Beacon street. Laid by Warren Brothers Company.				
Park street (city proper)	32	137	1918	July 14, 1923.
39 feet north of Tremont street to 7 feet north of Tremont street. Laid by Warren Brothers Company.				
Park street (Dorchester)	70	251	1918	Dec. 1, 1923.
Each side of Dorchester avenue. Laid by James Doherty				
School street (city proper)	570	1,298	1916	Nov. 13, 1921.
Washington street to Tremont street. Laid by Bernard E. Grant				
Somerset street (city proper)	334	716	1918	July 10, 1923.
Beacon street to 18 feet north of Ashburton place. Laid by Warren Brothers Company.				
State street (city proper)	376	1,332	1918	Oct. 1, 1923.
8 feet west of Merchants row to 6 feet west of India street. Laid by John E. Quinn.				
State street (city proper)	266	1,247	1917	June 19, 1922.
6 feet west of India street to 6 feet east of India street. Laid by Bernard E. Grant.				
State street (city proper)	609	4,317	1918	Oct. 1, 1923.
6 feet east of India street to Atlantic avenue. Laid by John E. Quinn				
South Market street (city proper)	43	190	1918	Jan. 17, 1924.
At Atlantic avenue. Laid by D'Onfro Brothers				
Southampton street (South Boston)	109	1,350	1918	Sept. 5, 1920.
Dorchester avenue to 109 feet west of Dorchester avenue. Laid by Central Construction Company.				
Sudbury square (city proper)	21	76	1918	Sept. 6, 1923.
At Sudbury street. Laid by Simpson Brothers Corporation				
Sudbury street (city proper)	933	3,435	1918	Sept. 6, 1923.
Court street to Haymarket square. Laid by Simpson Brothers Corporation.				
Summer street (city proper)	1,362	10,129	1917	July 16, 1922.
West side of South street to Harbor line, Fort Point Channel. Laid by Henry J. Clark.				
Washington street (city proper)	760	3,645	1917	Sept. 24, 1922.
Haymarket square to 24 feet south of Elm street. Laid by Bernard E. Grant.				

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.—*Concluded.*

STREETS.	Limits.	Length in Feet.	Area, Square Yards.	Year Laid.	Guaranty Expires.
Washington street (West Roxbury)....	Arborway across Asticon road (west side). Laid by James Doherty.....	.....	2,123	1916	Dec. 2, 1921.
Washington street (West Roxbury)....	142 feet south of Walk Hill street to Archdale road (north side). Laid by Simpson Brothers Corporation.	2,738	6,373	1918	Unfinished.
West Broadway (South Boston).....	Dorchester avenue to 93 feet east of Dorchester avenue. Laid by Central Construction Company.	93	549	1918	Nov. 9, 1920.
West Fourth street (South Boston)....	170 feet west of Dorchester avenue to 50 feet west of Dorchester avenue. Laid by Central Construction Company.	120	533	1918	Nov. 9, 1920.
West Fourth street (South Boston)....	50 feet west of Dorchester avenue to Dorchester avenue. Laid by Central Construction Company.	50	250	1918	Nov. 9, 1920.
West Fourth street (South Boston)....	Dorchester avenue to 111 feet east of Dorchester avenue. Laid by Central Construction Company.	111	432	1918	Nov. 9, 1920.
Total.....		51,896	243,171		

APPENDIX D.

REPORT OF THE DIVISION ENGINEER OF THE
SEWER AND SANITARY DIVISION.

BOSTON, February 1, 1919.

MR. THOMAS F. SULLIVAN,
Commissioner of Public Works:

DEAR SIR,— I submit herewith a statement of the activities, operations and expenditures of the various services of the Sewer and Sanitary Division for the year ending January 31, 1919.

The maintenance expenditures of the Sewer and Sanitary Division for the year were as follows:

Sewer Service	\$452,310 71
Sanitary Service	1,106,953 20
Street Cleaning and Oiling Service	745,639 57
	<hr/>
	<u>\$2,304,903 48</u>

SEWER SERVICE.

During the year 1918-19, owing to the decrease in the annual appropriation for the construction of sewers, only 6.94 miles of sanitary sewers and surface drains were built in the City of Boston. In the city proper the work was chiefly confined to construction of sewers in streets that were to be permanently repaved by the Paving Division, the principal ones being those built in Atlantic avenue, Commercial street, Causeway street, Leverett street and Portland street. In East Boston, Saratoga street; in Brighton, Washington street; in Charlestown, Chelsea street and Rutherford avenue, and in South Boston, the extension of Dorchester brook sewer and the D street outlet.

In the cleaning of catch-basins a new arrangement has been made; that is, contractors have been paid by the cubic yard removed instead of by the basin as was done in former years. The results have been entirely satisfactory and the number of complaints materially reduced.

There were 7,628 catch-basins and 156 drop inlets cleaned and a total of 28,767 cubic yards of material removed.

Plans have been prepared for repairs at the Calf Pasture pumping station, also for the renewal of the gates at the Moon Island reservoir.

The cleaning and flushing of old sewers has received the constant attention of the day-labor force and at the present time are in fairly good working condition.

SANITARY SERVICE.

Owing to war conditions and the prevalence of influenza, the forces in the Sanitary Service were greatly reduced during the past year and I would respectfully recommend that 100 laborers be added to the present working forces.

Studies have been made as to the substitution of a day-labor force in the so-called sanitary districts in East Boston, Dorchester, Hyde Park, West Roxbury and Brighton.

I would also recommend that the question of separation in certain sections of the city receive more attention during the coming year as this nonseparation of garbage and ashes has been the source of a great deal of complaint on our inland dumps. At the present time we have a number of wooden garbage wagons and these should be replaced with iron carts in order to collect the garbage in a sanitary manner.

The question of the collection of garbage and ashes in the unimproved alleys of the South End should receive the attention of the department and these alleys should be made public by an act of the Street Commissioners, so that our teams can be driven through and the collection made regularly and in a sanitary manner.

The purchase of new horses for this service should receive your earliest consideration as the horses are rapidly decreasing in number and wearing out under the hard work of this service.

STREET CLEANING AND OILING SERVICE.

During the past year an electric car sprinkler and flusher has proven entirely satisfactory for the sprinkling and flushing of streets on which there are car tracks. Owing to the refusal of the Government to allow the oil companies to use tank cars for furnishing oil, very little

oil was applied to the macadam highways, and I would respectfully recommend that at least 1,000,000 gallons of oil be asked for in the coming budget.

An investigation has been made as to the merits of various pick-up machines for sprinkling, brooming and picking up the dirt on our streets, and I would recommend that an Elgin street sweeper be purchased during the coming year, which I think is the most improved type of street cleaning machine on the market at the present time. The continuation of the use of motor-driven flushers and sprinklers in our paved streets have proven entirely satisfactory.

I would recommend that the forces of the Street Cleaning Service in their various districts be increased, especially as the improved type of paving due to the paving program of the Public Works Department is fast becoming a matter of record. This will apply to the so-called push-cart men, which should be increased from about 100 routes to at least 200. This would mean an increase of at least 150 men to the present force to give daily cleaning to our paved highways.

Respectfully,

E. F. MURPHY,

Division Engineer.

SEWER SERVICE.

The work of the service is carried on under chapters 28 and 40, Revised Ordinances of 1914, and the following statutes:

Chapter 426, 1897, as amended by 450, 1899, and 268, 1903.
 Chapter 383, 1903, as amended by 464, 1907.
 Chapter 550, 1907.
 Chapter 204, 1908.
 Chapter 514, 1908.
 Chapter 74, Special Acts of 1918.

THE DUTIES OF THE SEWER SERVICE.

1. Preparation of plans for sewerage works.
2. Construction and maintenance of all drainage works.
3. Investigation of complaints in regard to defective drainage.
4. The granting of permits for sewer construction.
5. The preparation of plans for the assessment of the cost of sewer construction.
6. The examination of the plans of other corporations proposing to construct works in public streets with reference to their probable interference with sewerage works.

Total number of employees on pay roll January 31, 1918	428
Total number of employees on pay roll January 31, 1919	319
Total amount of weekly pay roll January 31, 1918	\$9,165.54
Total amount of weekly pay roll January 31, 1919	\$7,370.70
Total amount of monthly pay rolls January 31, 1918	\$508.33
Total amount of monthly pay rolls January 31, 1919	\$933.32

PUBLIC WORKS DEPARTMENT.

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Total amount of monthly pension roll January 31, 1918:	
Veterans	\$618.89
Laborers	\$662.16
Total amount of monthly pension roll January 31, 1919:	
Veterans	\$544.63
Laborers	\$757.16
Average weekly pay roll, including monthly roll and exclusive of pension roll, for fiscal year,	\$7,849.59
Charged as follows:	
Maintenance	* \$4,375 68
Sewerage works	3,260 10
Separate systems of drainage	213 81
Average number of men employed	345
Number of men on pension roll January 31, 1918:	
Veterans	14
Laborers	22
Number of men on pension roll January 31, 1919:	
Veterans	12
Laborers	25
Average number of horses maintained by the service during the year	28
Rate of wages paid to common laborers	\$3 00
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* Includes amount charged to Paving Service	\$148 50
Includes amount charged to Water Service	974 08
Includes amount charged to Bridge Service	30 80
Includes amount charged to High Pressure Fire Service	127 23
Includes amount charged to Street Improvements	290 10
Includes amount charged to Chelsea street, Charlestown, widening	37 50
Includes amount charged to Norfolk street, Dorchester, widening	591 32

Financial Statement from February 1, 1918, to January 31, 1919.

Object.	Balances on Hand Feb. 1, 1918.	Appropriations, Loans and Transfers.	Transfers to.	Transfers from.	Total Credits.	Expenditures During the Year.	Balances on Hand Jan. 31, 1919.
Sewer service.....	.....	\$428,123 38	\$25,000 00	.....	\$453,123 38	\$452,310 71	\$812 67
Sewerage works.....	\$46,730 35	600,000 00	.....	.....	646,730 35	484,762 78	161,967 57
Separate systems of drainage....	60,363 85	.....	.....	.....	60,363 85	59,087 53	1,276 32
Totals.....	\$107,094 20	\$1,028,123 38	\$25,000 00	.....	\$1,160,217 58	\$996,161 02	\$164,056 56

MAINTENANCE EXPENDITURES, FEBRUARY 1, 1918,
TO JANUARY 31, 1919.

SEWER SERVICE.

Improved Sewerage.

Pumping Station, Calf Pasture, inside	\$129,155 75	
Pumping Station, Calf Pasture, outside	16,455 18	
Pumping Station, Calf Pasture, engines	32,019 03	
Pumping Station, Calf Pasture, boilers	20,286 73	
Pumping Station, Union Park street	5,484 27	
Pumping Station, Summer street	1,827 31	
Pumping Station, Hyde park	954 13	
		\$206,182 40
Moon Island		15,901 87
Main and intercepting sewers		16,575 82
		<u>\$237,850 09</u>

Stony Brook.

Maintenance	1,424 93
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Miscellaneous Maintenance Charges.

Cleaning catch-basins	78,050 58
Yards and lockers	1,134 65
Employed at yards	15,106 82
Horses, carts, harnesses, etc.	\$14,114 16
Teaming	12,923 34

	<u>\$27,037 50</u>	
Less amount earned by service teams	20,532 66	

		6,504 84
Automobiles		5,499 82
Cleaning sewers		22,223 95
Office salaries		13,109 46
Office expenses		2,065 12
Repairing department buildings	\$435 53	
Repairing catch-basins, South Boston	1,517 43	
Repairing catch-basins, East Boston	1,876 48	
Repairing catch-basins, Charlestown	1,123 38	
Repairing catch-basins, Brighton	725 05	
Repairing catch-basins, West Roxbury	2,771 46	
Repairing catch-basins, Dorchester	3,396 56	
Repairing catch-basins, Hyde Park	69 44	
Repairing catch-basins, Roxbury	2,575 50	
Repairing catch-basins, city proper	3,648 84	
Repairing sewers, South Boston	594 97	
Repairing sewers, East Boston	677 40	
Repairing sewers, Charlestown	968 55	
Repairing sewers, Brighton	710 00	
Repairing sewers, West Roxbury	1,297 15	
Repairing sewers, Dorchester	2,989 58	
Repairing sewers, Hyde Park	44 66	
Repairing sewers, Roxbury	2,064 98	
Repairing sewers, city proper	2,307 85	
		<u>29,794 81</u>

Carried forward \$412,765 07

<i>Brought forward</i>	\$412,765 07
Pension roll (veterans)	6,689 62
Pension roll (laborers)	8,443 62
Annuities	651 00
Fuel and oil	2,846 98
Hardware, tools, etc.	2,603 57
Engines and boilers	376 98
Sundries and miscellaneous charges	14,910 83
Telephones	257 66
House connections	7,697 19
Rubber goods	754 06
Gatehouses, Fenway	320 32
Stock	6,896 55

\$465,213 45

Credit.

Stock transferred and used on construction	\$11,857 29
Fuel and oil transferred and used on construction	1,013 55
Hardware, tools, etc., transferred and used on construction	31 90
	<hr/>
	12,902 74
	<hr/>
	\$452,310 71

Charges to Various Parties for Property Sold, for Work Done and Material Furnished.

Gulf Refining Company	\$350 00
Boston Elevated Railway Company	16 65
Frost Coal Company	18 50
Town of Brookline	30 50
Frederick Whalen	6 00
Metropolitan Water and Sewerage Board	15 75
Metropolitan Water and Sewerage Board	500 00
Metropolitan Water and Sewerage Board	5,869 36
Metropolitan Water and Sewerage Board	5,869 36
William J. Barry	105 00
B. F. & P. J. Doyle	10 00
Margaret L. Dennehy	8 00
Louis H. Jacobs	6 78
J. M. Sullivan	15 00
F. H. Barrett	6 75
Boston Wharf Company	104 75
Batavia Street Garage	112 45
Pine Street Garage	15 00
George H. Noone	25 75
P. J. Ducie	15 00
S. Malogoris	10 13
David J. Connell	22 79
Fuel Commission	24 24
John J. Murphy	15 00
Harry Bornstein	77 70
Hotel Thorndike	36 50
James J. Burke	6 75
Star Brewery Company	6 00
John E. Quinn	30 00
George Cherry	8 54
Total	<hr/>
	\$13,338 25

*Amounts Collected by City Collector for Sewer Service February 1, 1918,
to January 31, 1919.*

Gulf Refining Company	\$350 00
B. F. & P. J. Doyle	10 00
Metropolitan Water and Sewerage Board	5,869 36
F. Wheeler	6 00
M. L. Dennehy	8 00
Town of Brookline	30 50
Frost Coal Company	18 50
Metropolitan Water and Sewerage Board	15 75
L. H. Jacobs	6 78
J. M. Sullivan	15 00
Ames Street Garage	15 00
F. H. Barrett	6 75
Boston Wharf Company	104 75
P. J. Ducie	15 00
S. Malogoris	10 13
David J. Connell	22 79
H. Bornstein	40 00
John J. Murphy	15 00
Fuel Commission	24 24
Hotel Thorndike	36 50
Batavia Street Garage	112 45
George Cherry	8 54
	<hr/>
	<u>\$6,741 04</u>

Sewer Service.— Maintenance Expenditures, Detail, 1918-19.

Accounts.	Total Expendi- ture.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Automobiles (5).....	\$5,499 82	\$2,296 50				Repairs..... \$977 32 Equipment..... 1,073 05 Supplies..... 1,037 95 Fees..... 115 00 \$3,203 32
Cleaning catch-basins.....	78,050 58	23,819 91	\$3,919 38	\$573 20	\$49,544 31	Transportation, etc.... \$111 98 Advertising..... 4 80 Dumping..... 77 00 193 78
Cleaning sewers.....	22,223 95	8,452 59	3,004 00	320 80	4,526 40	Machine cleaning: Machines..... \$698 25 Labor..... 4,606 45 Transportation, etc... 15 46 5,320 16
Engines and boilers.....	376 98	40 28				Waste, etc..... \$28 29 Repairs and inspection. 308 41 336 70
Employed at yards.....	15,106 82	15,106 82				
Fuel and oil.....	2,846 98		4 00			Coal..... \$1,589 40 Oil and gasoline..... 1,253 58 2,842 98
Hardware and tools.....	2,603 57		30 76			Hose..... \$332 15 Hardware, repairs, etc.. 1,689 96 2,571 81
House connections.....	7,697 19	7,375 23		90 46		Transportation..... \$231 50 231 50

Horses, carts, harnesses, etc.	14,114 16	6,198 97					Fodder.....	\$6,379 66	
							Stable goods and supplies.....	290 31	
							Veterinary services.....	87 25	
							Repairs, wagons and harnesses.....	390 33	
							Shoeing.....	767 74	7,915 19
Maintenance, Stony brook.	1,424 93	1,348 93	76 00				Postage and printing.....	\$390 98	
Office expenses.	2,065 12						Stationery and supplies.....	1,550 40	
							Miscellaneous.....	133 74	2,085 12
Office salaries.	13,109 46	13,109 46					{ 63 pairs boots.....		
							{ 63 coats.....		
Rubber goods.	754 06						{ 51 pairs mitts.....		754 06
							{ 48 hats.....		
Stock.....	6,896 55	457 75	749 39	5,689 41			Gas and electricity.....	\$277 54	
Teaming.....	12,923 34	12,923 34					Miscellaneous.....	342 17	619 71
Yard and locker.....	1,134 65	95 19	84 00						257 66
Telephones.....	257 66						Electricity.....	\$295 77	
Back Bay Fens, gatehouses.....	320 32						Repairs.....	24 55	320 32
Miscellaneous, sundries.....	14,910 83	13,309 07	969 48	326 56			Repairs.....	\$134 05	
							Transportation.....	53 72	
							Photographs.....	117 95	305 72
Repairing department buildings.....	435 53			435 53					
Repairing catch-basins.	1,517 43	827 62	148 76	541 05					
" " " South Boston.....	1,876 48	1,140 24	378 75	357 49					
" " " East Boston.....	1,123 38	708 00	176 75	238 63					
" " " Charlestown.....	725 05	300 00	187 50	237 55					
" " " Brighton.....	2,771 46	1,185 51	480 75	1,105 20					
" " " West Roxbury.....	3,396 56	1,334 19	640 00	1,422 37					
" " " Dorchester.....	69 44	38 49	13 50	17 45					
" " " Hyde Park.....									

Sewer Service.— Maintenance Expenditures, Detail, 1918-19.

ACCOUNTS.	Total Expendi- ture.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Automobiles (5).....	\$5,499 82	\$2,296 50	.....	.....	.....	Repairs.....\$977 32 Equipment.....1,073 05 Supplies.....1,037 95 Fees.....115 00 \$3,203 32
Cleaning catch-basins.....	78,050 58	23,819 91	\$3,919 38	\$573 20	\$49,544 31	Transportation, etc.....\$111 98 Advertising.....4 80 Dumping.....77 00 193 78
Cleaning sewers.....	22,223 95	8,452 59	3,004 00	320 80	4,526 40	Machine cleaning: Machines.....\$698 25 Labor.....4,606 45 Transportation, etc...15 46 5,320 16
Engines and boilers.....	376 98	40 28	.....	.....	.....	Waste, etc.....\$28 29 Repairs and inspection.....308 41 336 70
Employed at yards.....	15,106 82	15,106 82	.....	.....	.....	Coal.....\$1,589 40 Oil and gasoline.....1,253 58 2,842 98
Fuel and oil.....	2,846 98	.....	4 00	.....	.....	Hose.....\$882 15 Hardware, repairs, etc...1,689 96 2,571 81
Hardware and tools.....	2,903 57	.....	30 76	.....	.....	Transportation.....\$231 50 231 50
House connections.....	7,697 19	7,375 23	.....	90 46	.....

Horses, carts, harnesses, etc.	14,114 16	6,198 97				Fodder.....	\$6,379 56
						Stable goods and sup- plies.....	290 31
						Veterinary services.....	87 25
						Repairs, wagons and harnesses.....	390 33
						Shoing.....	767 74
							7,915 19
Maintenance, Stony brook.	1,424 93	1,348 93	76 00			Postage and printing.....	\$380 98
Office expenses.	2,065 12					Stationery and sup- plies.....	1,550 40
						Miscellaneous.....	133 74
Office salaries.	13,109 46	13,109 46					2,065 12
Rubber goods.	754 06					{ 63 pairs boots.....	{
Stock.	6,896 55	457 75	749 39	5,639 41		{ 63 coats.....	{
Training.	12,923 34	12,923 34				{ 51 pairs mitts.....	{
Yard and locker.	1,134 65	95 19	84 00		335 75	{ 48 hats.....	{
							754 06
Telephones.	257 66					Gas and electricity.....	\$277 54
Back Bay Fens, gatehouses.	320 32					Miscellaneous.....	342 17
							619 71
							257 66
						Electricity.....	\$295 77
						Repairs.....	24 55
							320 32
Miscellaneous, sundries.	14,910 83	13,309 07	969 48	326 56		Repairs.....	\$134 05
						Transportation.....	53 72
						Photographs.....	117 95
							305 72
Repairing department buildings.	435 53			435 53			
Repairing catch-basins, South Boston.	1,517 43	827 62	148 76	541 05			
" " " " East Boston.	1,376 48	1,140 24	378 75	357 49			
" " " " Charlestown.	1,123 38	708 00	176 75	238 63			
" " " " Brighton.	725 05	300 00	187 56	237 55			
" " " " West Roxbury.	2,771 46	1,185 51	480 75	1,105 20			
" " " " Dorchester.	3,396 56	1,334 19	640 00	1,422 37			
" " " " Hyde Park.	69 44	38 49	13 50	17 45			

Sewer Service.— Maintenance Expenditures, Detail, 1918-19.

	Total Expendi- tures.	Labor.	Con- tracts.	Teaming.	Waste.	Coal and Wood.	Oil and Gasoline.	Packing.	Valves.	Trans- porta- tion.	Stable.	Pipe Fittings and Miscel- laneous.	Towing.	Autos.
Pumping station, inside, Calf Pasture.....	\$129,155 75	\$23,617 16			\$552 56	\$97,764 33	\$143 38			\$9 94		\$7,068 38		
Pumping station, outside, Calf Pasture.....	16,455 18	12,557 05		\$40 50							\$1,142 26	831 41	\$900 00	\$983 96
Pumping station, engines, Calf Pasture.....	32,019 03	23,474 90					2,277 60	\$2,358 36	\$1,308 48			2,569 69		
Pumping station, boilers, Calf Pasture.....	20,286 73	18,005 81										2,280 92		
Pumping station, Union Park street.....	5,484 27	4,101 37		57 75		190 32						1,134 83		
Pumping station, Summer street.....	1,827 31	382 20										1,445 11		
Pumping station, Hyde Park.....	954 13	540 20								2 83		411 10		
Moon Island.....	15,091 87	11,973 09	\$610 00	36 00		581 59	37 97			520 84	466 32	866 06		
Main and intercepting sewers.....	16,651 82	12,830 74		1,915 39		88 78	62 08			1 60	576 33	756 43		420 47
<i>Credits.</i>														
Main and intercepting sewers:			\$610 00	\$2,049 64	\$552 56	\$98,625 02	\$2,521 03	\$2,358 36	\$1,308 48	\$635 21	\$2,184 91	\$17,393 63	\$900 00	\$1,401 43
Amount earned by service teams.....	76 00	48 00									28 00			
Totals.....	\$237,850 09	\$107,434 52	\$610 00	\$2,049 64	\$552 56	\$98,625 02	\$2,521 03	\$2,358 36	\$1,308 48	\$635 21	\$2,184 91	\$17,393 93	\$900 00	\$1,401 43

Recapitulation.— Maintenance Detail, 1918-19.

	Improved Sewerage.	Outside Improved Sewerage.	Totals.
Labor.....	\$107,482 52	\$134,595 41	\$242,077 93
Contracts.....	610 00	54,406 46	55,016 46
Teaming, hired and city.....	2,049 64	13,829 88	15,879 52
Waste.....	552 56	28 29	580 85
Fuel.....	98,625 02	1,589 40	100,214 42
Oil.....	2,521 03	1,253 58	3,774 61
Packing.....	2,358 36		2,358 36
Valves.....	1,308 48		1,308 48
Transportation, etc.....	535 21	397 20	932 41
Horses, etc.....	2,184 91	7,915 19	10,100 10
Towing.....	900 00		900 00
Pipe fittings and miscellaneous.....	17,393 93		17,393 93
Telephone.....		257 66	257 66
Automobiles, repairs and supplies.....	1,404 43	3,203 32	4,607 75
Stock and miscellaneous supplies.....		30,419 63	30,419 63
	\$237,926 09	\$247,896 02	\$485,822 11
CREDITS.			
<i>Improved Sewerage.</i>			
Labor.....	\$48 00		
Stables.....	28 00		
	76 00		
<i>Outside Improved Sewerage.</i>			
Miscellaneous.....	\$7,889 67		
Labor.....	13,688 44		
Stock.....	11,857 29		
		33,435 40	33,511 40
	\$237,850 09	\$214,460 62	\$452,310 71

WASTE.
3,674 pounds at 14½c. to 17½c. \$561 73

COAL.
9,875 ¹¹/₁₆ tons bituminous. \$97,764 13
7 ¹¹/₁₆ tons bituminous. 72 54
55 ¹¹/₁₆ tons anthracite. 594 33
\$98,431 00

TOWING.
Boston Tow Boat Company \$50 00
New England Fuel and Trans-
portation Company 850 00
\$900 00

PACKING.
1,870 ¹/₂ pounds at 40c. to \$2 and
120 feet at .26c. and .588c. \$2,290 65

OIL.
3,156.67 gallons engine at 30c.
to 39.6c. \$1,116 03
1,254.21 gallons cylinder at 35c.
to 63c. 620 80
48.14 gallons machine at
50c. 24 07
20 gallons lard at \$1.75 26 50
15 gallons air cylinder at
45c. 9 50
104 gallons sperm at \$2.06
to \$2.10 216 24
250 gallons turbine at 42c.
to 45c. 109 06
626 ¹/₂ gallons kerosene at 10c.
to 16½c. 76 39
1,065 gallons gasoline at 24c.
to 27c. 257 50
3,341 pounds grease at 12½c.
to 14c. 429 00
109 gallons automobile at
39c. to 50c. 50 74

Coal at Pumping Station, Calf Pasture.

DATE.	Contractor.	Tons.	PAID IN 1918-19.	
			Per Ton.	Total.
1918.				
Jan. 8...	New England Coal & Coke Company..	426,118	{ \$9 20 06	\$3,949 97
	John Donohue. Stevedoring.....		50	214 50
Jan. 20...	Castner, Curran & Bullett, Inc.....	604,118	{ 9 95 06	6,046 22
	John Donohue. Stevedoring.....		50	300 00
	Maritime Coaling Company. Lightering.....			999 00
Feb. 20...	C. H. Sprague & Son.....	891,118	10 25	920 76
Feb. 21...	C. H. Sprague & Son.....	534	{ 10 32 06	5,542 92
	John Donohue. Stevedoring.....		50	267 00
	John Donohue. Lightering.....			126 00
Mar. 8...	Northern Coal Company.....	1,481	8 55	12,662 55
	John Donohue. Stevedoring.....		50	740 50
May 23...	Coastwise Coal Company.....	279,118	{ 9 50 06	2,671 00
	John Donohue. Stevedoring.....		50	209 25
June 5...	D. Doherty & Co.....	191,118	10 25	201 98
	C. H. Sprague & Son.....	464,118	{ 9 91 06	4,634 93
	John Donohue. Stevedoring.....		75	348 00
June 7...	Coastwise Coal Company.....	290,118	{ 9 65 06	2,815 95
	John Donohue. Stevedoring.....		75	216 75
July 10...	C. H. Sprague & Son.....	531,118	{ 9 91 06	5,298 48
	John Donohue. Stevedoring.....		75	398 25
July 16...	C. H. Sprague & Son.....	787,118	{ 10 37 06	8,215 67
	John Donohue. Stevedoring.....		75	591 75
Aug. 10...	Metropolitan Coal Company.....	512,118	{ 9 75 06	5,028 19
	John Donohue. Stevedoring.....		75	402 75
Aug. 20...	Chesapeake & Ohio Coal Agency Com- pany.	831,118	8 832	7,342 63
	John Donohue. Stevedoring.....		75	623 25
	Castner, Curran & Bullett, Inc.:			
	Lightering.....		50	
	Weighing.....		06	
	Tax.....		12 47	
	Insurance.....		41 57	
				519 60

Coal at Pumping Station, Calf Pasture.— *Concluded.*

DATE.	Contractor.	Tons.	PAID IN 1918-19.	
			Per Ton.	Total.
1918.				
Aug. 26...	Coastwise Coal Company.....	415,440	{ 9 75 06	\$4,074 87
	John Donohue. Stevedoring.....		75	311 25
Aug. 30...	Chesapeake & Ohio Coal Agency Com- pany.	849,440	8 832	7,502 15
	John Donohue. Stevedoring.....		75	636 75
	Castner, Curran & Bullett, Inc.:			
	Lightering.....		50	} 530 88
	Weighing.....		06	
	Tax.....		12 74	
	Insurance.....		42 47	
Sept. 3...	Metropolitan Coal Company.....	441,440	{ 9 00 06	4,003 84
	Coastwise Coal Company. Lightering,		75	331 44
Sept. 8...	Chesapeake & Ohio Coal Agency Com- pany.	890,440	8 832	7,861 47
	John Donohue. Stevedoring.....		75	667 50
	Castner, Curran & Bullett, Inc.:			
	Lightering.....		50	} 556 33
	Weighing.....		06	
	Tax.....		13 35	
	Insurance.....		44 51	
	Totals.....	9,449,440	.....	\$97,764 33

Catch-basins Cleaned by Contract, 1918-19.

District.	Contractor.	Start and Finish of Work.	Price per Cubic Yard.	Cubic Yards Examined by Districts.	Contractor Received by District.	Total Basins Cleaned.	Total Drop Inlets Cleaned.	Average Cubic Yards per Basin.	Total Cost of Inspection.	Average Total Cost to City per Basin.
1. East Boston and Charlestown.....	J. W. Collins & Co.....	{ May 13, 1918 Oct. 31, 1918 }	\$1 90	{ 723.65 980.23 }	{ \$1,434 10 1,803 27 }	218 274	1 1	2 30 3 56	{ \$814 44 2,156 20 }	\$8 21 7 53
2. South Boston and Dorchester.....	M. H. Loomie.....	{ Mar. 2, 1918 Jan. 31, 1919 }	1 67	{ 2,748.26 5,764.16 }	{ 4,719 13 10,364 03 }	710 1,516	6 58	3 84 3 69	{ 2,156 20 1,056 33 }	7 53 7 55
3. West Roxbury and Hyde Park.....	M. H. Loomie.....	{ Mar. 18, 1918 Jan. 6, 1919 }	1 67	{ 2,109.54 627.19 }	{ 3,676 63 1,098 64 }	619 148	3 2	3 39 4 18	{ 1,056 33 2,459 17 }	7 55 9 38
4. Roxbury, South End, Back Bay and Brighton.....	M. H. Loomie.....	{ Mar. 1, 1918 Jan. 31, 1919 }	1 97	{ 8,625.74 1,657.21 }	{ 17,863 72 3,718 08 }	2,073 432	29 6	4 10 3 78	{ 2,459 17 1,063 87 }	9 38 6 72
5. City proper.....	J. W. Collins & Co.....	{ Feb. 4, 1918 Feb. 1, 1919 }	1 83	5,530.92	10,266 20	1,639	49	3 27	1,063 87	6 72

Total catch-basins cleaned..... 7,629
 Total drop inlets cleaned..... 165
 Total costs: Contractors..... *\$54,743 80 (Includes \$2,341.36 for freeing catch-basins.)
 Inspection..... 19,178 00
 Advertising..... 4 80
 Miscellaneous..... 143 48
\$64,070 08

* Paid in 1919, \$8,233.92. † Includes \$1,628.04 salary of transitman in charge.
 Cubic yards material removed, total 28,766.90.
 Average cost per basin (including drop inlets), \$7.93.

Sewerage Works.

Expenditures February 1, 1918, to January 31, 1919.

Accounts.	Labor.	Teaming.	Materials.	Miscellaneous.	Paid to Contractors.	Totals.
Engineers' salaries	\$95,265 71	.....	.....	.....	.....	\$95,265 71
Engineers' expense	1,108 48	\$683 00	.....	\$3,901 76	\$58 95	5,752 19
Pumping stations	73 35	.....	.....	167 11	576 00	816 46
Sundries	3,893 12	43 58	.....	1,035 62	4,985 97	9,958 29
Land-takings and court executions .....	.....	.....	.....	350 00	.....	350 00
New manholes, entire city	5,805 72	800 13	\$3,179 40	52 16	215 20	10,052 61
New catch-basins, South Boston	744 49	107 00	570 97	5 75	1,075 15	2,503 36
New catch-basins, East Boston	722 65	40 00	502 20	.....	.....	1,264 85
New catch-basins, Charlestown	285 58	.....	300 46	.....	.....	586 04
New catch-basins, Brighton	613 59	.....	291 88	.....	.....	905 47
New catch-basins, West Roxbury	1,999 42	235 50	1,639 18	.....	.....	3,874 10
New catch-basins, Dorchester	1,390 71	162 75	1,060 16	.....	.....	2,613 62
New catch-basins, Hyde Park	177 82	28 50	562 92	.....	.....	769 24
New catch-basins, Roxbury	625 06	28 00	705 35	.....	262 35	1,620 76
New catch-basins, city proper	6,037 04	574 76	4,264 70	64 25	1,677 38	12,618 13
Sewers built in entire city	49,054 04	1,446 75	20,359 03	220 00	264,732 13	335,811 95
Totals	\$167,796 78	\$4,149 97	\$33,436 25	\$5,796 65	\$273,583 13	\$484,762 78

1880

SEWERAGE WORKS LOAN EXPENDITURES FOR 1918 AND 1919.

SOUTH BOSTON.

Strandway and Old Harbor improvement . . .	<u>\$7,261 84</u>
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EAST BOSTON. .

Faywood avenue, from Orient avenue to Tower street . . .	\$7,307 03
Webster street, from Orleans street to 220 feet easterly . . .	103 43
Saratoga street, from Trumbull street to a point 220 feet easterly . . .	6,032 90
	<u>\$13,443 36</u>

Built 2,115.50 linear feet, 17 manholes, 8 catch-basins.

CHARLESTOWN.

Cambridge street, from existing sewer 100 feet west of Stark street to Crescent street . . .	\$49 84
Rutherford avenue, from Baldwin street to Allen street . . .	2,910 82
Chelsea street, from Chamber street to Henley street, and Gray street, from Water street to Chelsea street . . .	19,804 04
Princeton street, from Tufts street to Lexington street . . .	2,407 85
Bunker Hill street, from Tufts street to west line of Sprague street . . .	2,922 95
Rutherford avenue, from Chapman street to Cambridge street . . .	4,270 78
Corey street, from Moulton street to a point 170 feet northerly . . .	166 10
	<u>\$32,532 38</u>

Built 4,205.70 linear feet, 34 manholes, 6 catch-basins.

BRIGHTON.

Bellamy street, from Richards street to Matchett street	\$707 51
Perthshire road, from Matchett street to 30 feet east of Atkins street	
Bellamy street, from Burton street to Richards street	
Washington street, from Tip Top street to Market street	33,917 11
Shepard brook, easterly branch in Arden street.	4,876 10
Adams street, Alcott street, Coolidge road,	
Haskell street, Hooker street and Mansfield street,	
Cambridge street, from Mayflower street to Royal road	756 24
Hichborn street, from Arthur street to 80 feet easterly	694 17
	<hr/>
	<u>\$40,951 13</u>

Built 8,596.67 linear feet, 67 manholes, 5 catch-basins.

WEST ROXBURY.

Grover street, from Florence street to Neponset avenue	\$198 31
Grover avenue, from Grover street to 160 feet north and west	
South Conway street, from Robert street to South street	258 69
Weld street, from Walker street to Arthur street,	24 14
Haydn street, from Nikisch avenue to Washington street	556 85
Brahms street, from Nikisch avenue to Washington street	
Poplar street, from Dale street to Metropolitan avenue	3,539 77
Caledonian avenue, from Spring street to Hamilton street	515 39
Grove street, near Attair road	948 81
Richwood street, Centre street, Willow street and private land	11,682 45
Arboretum road, from Washington street to New York, New Haven & Hartford Railroad	2,354 90
Lanesville terrace, from Arboretum road to Stony brook	
Washington street, from New York, New Haven & Hartford Railroad to Stony brook	11,243 52
	<hr/>
<i>Carried forward</i>	<u>\$31,322 83</u>

<i>Brought forward</i>	\$31,322 83
Catherine street, from Florence street to Meyer street	10,204 04
Meyer street, from Catherine street to Board of Survey street No. 2089	
La Grange street, from 189 feet northwest of Sturges road to Sturges road	7,166 58
Green street, from Washington street to Brookside avenue	464 25
Union avenue, from Green street to 200 feet southwesterly	
Archdale road, from Washington street to South street	219 30
South street, from Archdale road to Leshner street	
	<hr/>
	<u>\$49,377 00</u>

Built 4,048 linear feet, 31 manholes, 22 catch-basins.

DORCHESTER.

Almont street, from 330 feet north of Blue Hill avenue to Walk Hill street	\$39,203 16
Favre street, from 100 feet northeast of Canaan street to Hersey street	
Hersey street, from Favre street to Street 2037, Street 2037, from Hersey street to Street 2302, Street 2302, from Street 2037 to Orlando street, Orlando street, from Street 2302 to Almont street	
Monterey street, from Orlando street to Almont street	
Codman street, from 210 feet east of Washington street	
Pleasant street, at Whitby terrace and Hesston terrace	932 51
Dorchester avenue, from Hancock street to Dorchester avenue	32 28
Edgewater drive, from Tokio street to Malta street	
Bowdoin street, from Topliff street to Olney street	3,917 46
Topliff street, from Bowdoin street to 50 feet southerly	
East Cottage street, from Norfolk avenue to railroad	994 04
Ruggles place, from Avondale place to Washington street	16 50
	<hr/>
<i>Carried forward</i>	\$45,095 95

<i>Brought forward</i>	\$45,095 95
Elder street, from Humphreys street to Cawfield street	4,077 06
Deer street, from Melvinside terrace to Roach street	100 00
Stanwood street, from Normandy street to about 284 feet southeasterly	1,796 52
Norfolk street, from Corbet street to Blue Hill avenue	514 96
Walk Hill street, from Norfolk street	
Mildred avenue and private land from Mildred avenue to Astoria street	
Irma street, from Callender street to Woodrow avenue	4,379 25
Baird street and outlet in Morton street to Blue Hill avenue	5,316 77
Deer street, from Roach street to 75 feet north	548 51
Itasca street, from 75 feet southwest of 7 Almont street to Mattapan street.	4,418 86
Rockingham road, from Oakland street to Randolph road	2,702 77
Dorchester avenue, from Savin Hill avenue to Rawson street	3,275 80
East Cottage street, from Pond street to Columbia road	18,534 41
Harvard street, from Brookview street to 120 feet northerly	903 42
Ruxton road, from Rugby road to 311 feet northwesterly	480 60
Freeport street, from Hewins street to 160 feet southwest of Victory road	1,012 37
	<u>\$93,157 25</u>

Built 10,070.68 linear feet, 66 manholes, 33 catch-basins.

HYDE PARK.

Child street, from Chestnut street to Gordon avenue	\$218 45
Hyde Park avenue, from Dana avenue to Folsom street	274 52
Dana avenue, from Hyde Park avenue to Folsom street	
Folsom street, from Dana avenue to Pine street,	3,399 82
Beaver street, from Cleveland street to 235 feet northwesterly	
<i>Carried forward</i>	<u>\$3,892 79</u>

PUBLIC WORKS DEPARTMENT.

469

<i>Brought forward</i>	\$3,892 79
Hillside street, from River street to Church street	141 41
Church street, from River street to Hillside street	
Hyde Park avenue, under railroad bridge	49 25
Pinehurst area	300 00
Hyde Park avenue, from Metropolitan avenue to River street	2,901 13
Prospect street, from Fairmount avenue to 732 feet northeasterly	3,842 86
Fairmount avenue, from 110 feet northeast of Prospect street to Prospect street	
Damrell avenue and Nelson street	436 66
	<u>\$11,564 10</u>

Credit.

Erie street, at Neponset avenue	14 42
	<u><u>\$11,549 68</u></u>

Built 1,231.38 linear feet, 6 manholes.

ROXBURY.

Catch-basins in Roxbury	\$5,877 59
Connolly street, from Fellows street to Harrison avenue	412 22
Parker Hill avenue, from Darling street to 60 feet east	235 89
Pontiac street, from Cherokee street to Hillside street	2,807 65
Public Alley No. 818, from Public Alley No. 819 to about 200 feet east	600 11
Public Alley No. 819, from Westland avenue to Public Alley No. 818	
Hulbert street, from Ray street to 200 feet east	1,394 73
	<u><u>\$11,328 19</u></u>

Built 583.03 linear feet, 4 manholes, 4 catch-basins.

CITY PROPER.

Atlantic avenue, from Summer street to Belcher lane	\$10,207 09
Avon street, from 80 feet southeast of Washington street to 70 feet southeast	378 32
<i>Carried forward</i>	<u>\$10,585 41</u>

<i>Brought forward</i>	\$10,585 41
Utica street, from Beach street to Utica place	1,148 82
Randolph street, from Harrison avenue to 190 feet easterly	72 04
East Canton street, from Washington street to 250 feet southeast	4,034 57
Revere street, from Irving street to Garden street, Causeway street, from Beverly street to Leverett street	1,769 82
Leverett street, from Charles street to Green street	5,934 70
Portland street, from Merrimac street to Sudbury street	12,159 72
Atlantic avenue, from Kneeland street to Commercial street	8,267 78
Commercial street, from Atlantic avenue to Prince street	13,185 84
Catch-basins, manholes and drains	15,219 23
Maple place, from Harrison avenue to 180 feet northwest	3,833 19
	<u>\$76,211 12</u>

Built 3,542.53 linear feet, 33 manholes, 81 catch-basins.

SEWERAGE WORKS LOAN, 1918-19.

Engineers' salaries, general	\$95,265 71
Amount charged to construction of sewers	11 649 00
	<u>\$106,914 71</u>

ENGINEERS' EXPENSE.

Labor	\$1,108 48
Teaming	683 00
Borings	58 95
Transportation	1,544 19
Photographs	112 62
Supplies, etc.,	2,244 95
	<u>\$5,752 19</u>

PUMPING STATION CONSTRUCTION.

Advertising	\$5 25
Labor	73 35
Engine and boiler work	737 86
	<u>\$816 46</u>

SUNDRIES.

Labor	\$3,893 12
Teaming	43 58
Expert services	145 00
Restoring street surfaces, etc. (Berkeley street, Woodcliff street, Dacia street and others) . . .	4,985 97
Air compression, Moon Island	597 50
Damages	282 66
Transportation	56
Dumping	4 50
Advertising	5 40
	<hr/>
	<u>\$9,958 29</u>

COURT EXECUTIONS AND AWARDS ON ACCOUNT OF LAND-
TAKINGS, ETC.

R. H. Robinson, Dent street, West Roxbury . .	<u>\$350 00</u>
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Sewerage Works. — New Manholes.

Location.	Built by	Number.	Labor.	Teaming.	Material.	Totals.	Begun.	Finished.
Milton place, city proper.....	Day labor.....	2	\$216 09	\$51 00	\$140 92	\$408 01	Mar. 1	Mar. 21
Creek square, city proper.....	Day labor.....	1	63 25	24 00	51 50	138 75	Mar. 21	Mar. 27
Chelsea street, Charlestown.....	Day labor.....	1	99 40	24 00	73 49	196 89	April 1	April 6
Myrtle street, West Roxbury.....	Day labor.....	1	176 74	45 00	108 81	329 55	April 22	April 27
Stoughton street, Dorchester.....	Day labor.....	1	58 00	12 00	51 70	121 70	April 22	April 25
Washington street, West Roxbury.....	Day labor.....	1	191 44	14 00	50 80	256 24	May 2	May 9
Roland street, Charlestown.....	Day labor.....	1	351 60	85 50	100 00	537 10	May 9	June 4
Seventh street, South Boston.....	Day labor.....	1	52 65	9 00	45 50	107 15	May 17	May 25
Alford street, Charlestown.....	Day labor.....	1	84 80	32 00	117 45	234 25	April 22	May 16
Walnut street, Dorchester.....	Day labor.....	2	105 24	9 00	96 30	210 54	June 10	June 13
Park street, city proper.....	Day labor.....	2	365 83	76 50	149 65	591 98	June 24	July 10
Maple street, West Roxbury.....	Day labor.....	1	67 83	19 50	21 15	108 48	July 21	Aug. 6
Carleton street, city proper.....	Day labor.....	4	586 60	.....	134 50	721 10	Aug. 6	Aug. 29
Friend street, city proper.....	Day labor.....	1	109 31	28 13	57 09	194 53	Aug. 5	Aug. 15
Ferry street, city proper.....	Day labor.....	1	63 70	.....	80 05	143 75	Sept. 10	Sept. 17
Gladstone street, East Boston.....	Day labor.....	1	179 79	.....	171 61	351 40	Sept. 27	Oct. 15
Baldwin street, Charlestown.....	Day labor.....	2	268 00	.....	127 55	395 55	Sept. 27	Nov. 6
Motte street, city proper.....	Day labor.....	1	31 50	.....	49 20	80 70	Oct. 21	Nov. 15
Pelham street, city proper.....	Day labor.....	2	447 18	.....	108 85	556 03	Oct. 28	Nov. 9
Oakdale street, West Roxbury.....	Day labor.....	1	82 20	.....	50 76	132 96	Nov. 25	Nov. 27

Fordham road, Brighton.....	Day labor.....	1	159 35	.....	53 37	212 27	Dec. 16	Dec. 26
Blue Hill avenue, Dorchester.....	Day labor.....	1	97 20	.....	41 50	138 70	Dec. 16	Dec. 21
Private land, between Wrentham and Ashmont streets, Dorchester.....	Day labor.....	1	124 16	.....	78 48	202 64	Jan. 8, 1919	Jan. 13
Massachusetts General Hospital grounds, city proper.....	Day labor.....	1	55 44	13 50	36 87	105 81	Aug. 7	Aug. 12
Chester place, city proper.....	Day labor.....	1	88 89	14 00	45 70	148 59	April 12	April 16
Miscellaneous and rebuilding.....	.....	.....	1,508 11	211 00	159 00	1,878 11		
Paid in 1918, built in 1917.....	.....	.....	* 387 62	132 00	1,029 76	1,549 38		
Totals.....	.....	33	\$6,020 92	\$800 13	\$3,231 56	\$10,052 61		

* Includes \$215.20 paid to contractors.

SEWERAGE WORKS LOAN.

New Catch-basins Paid for, February 1, 1918, to January 31, 1919. (Contract and Day Labor.)

District.	Built by	Built in 1917.	Built in 1918.			Total Expenditure.	Location.	Number Catch-basins Built.	Number Catch-basins Rebuilt.
			Materials, etc.	Labor.	Co-contractor.	Material and Teaming.			
New catch-basins, South Boston.....	Day labor.....	\$1,263 45	.....	.....	.....	.....	\$1,263 45	.....	.....
New catch-basins, South Boston.....	Day labor.....	.....	.....	\$213 05	.....	\$175 97	389 02	1	.....
New catch-basins, South Boston.....	Day labor.....	.....	.....	169 51	.....	179 98	349 49	1	.....
New catch-basins, South Boston.....	Day labor.....	.....	.....	67 13	.....	106 73	173 86	1	.....
New catch-basins, South Boston.....	Day labor.....	.....	.....	294 80	.....	32 74	327 54	.....	.....
New catch-basins, East Boston.....	Day labor.....	\$1,263 45	.....	\$744 49	.....	\$495 42	\$2,503 36	3	.....
New catch-basins, East Boston.....	Day labor.....	\$331 81	.....	.....	.....	.....	\$331 81	.....	.....
New catch-basins, East Boston.....	Day labor.....	.....	.....	\$168 40	.....	\$160 77	329 17	1	.....
New catch-basins, East Boston.....	Day labor.....	.....	.....	171 80	.....	49 62	221 42	.....	.....
New catch-basins, East Boston.....	Day labor.....	.....	.....	382 45	.....	.....	382 45	.....	1
New catch-basins, Charlestown.....	Day labor.....	\$331 81	.....	\$722 65	.....	\$210 39	\$1,264 85	1	.....
New catch-basins, Charlestown.....	Day labor.....	\$193 47	.....	.....	.....	.....	\$193 47	.....	.....
New catch-basins, Charlestown.....	Day labor.....	.....	.....	\$235 58	.....	\$106 99	392 57	1	.....
New catch-basins, Brighton.....	Day labor.....	\$193 47	.....	\$235 58	.....	\$106 99	\$586 04	1	.....
		\$80 00	.....	.....	.....	.....	\$80 00	.....	.....

New catch-basins, Brighton.....	Day labor.....	\$200 59	\$123 66	\$324 25	Hendrick street.....	1
New catch-basins, Brighton.....	Day labor.....	275 19	88 22	363 41	Everett street.....	1
New catch-basins, Brighton.....	Day labor.....	137 81	.....	137 81	Connections.	2
New catch-basins, West Roxbury.....	Day labor.....	\$80 00	\$211 88	\$905 47		
New catch-basins, West Roxbury.....	Day labor.....	\$909 65	.....	\$909 65		
New catch-basins, West Roxbury.....	Day labor.....	\$151 27	\$169 15	320 42	Johnson street.....	1
New catch-basins, West Roxbury.....	Day labor.....	161 75	119 70	281 45	Corey street.....	1
New catch-basins, West Roxbury.....	Day labor.....	112 80	75 35	188 15	Brookside avenue.....	1
New catch-basins, West Roxbury.....	Day labor.....	279 79	215 82	495 61	Rockwood street.....	2
New catch-basins, West Roxbury.....	Day labor.....	123 05	59 44	182 49	Newburg street.....	1
New catch-basins, West Roxbury.....	Day labor.....	255 53	297 91	553 44	Pond street.....	2
New catch-basins, West Roxbury.....	Day labor.....	191 76	99 60	291 36	Brown avenue.....	1
New catch-basins, West Roxbury.....	Day labor.....	364 68	277 85	642 53	Corey street.....	2
New catch-basins, West Roxbury.....	Day labor.....	.....	9 00	9 00	Connections.	
New catch-basins, Dorchester.....	Day labor.....	\$909 65	\$1,323 82	\$3,874 10		11
New catch-basins, Dorchester.....	Day labor.....	\$285 14	.....	\$285 14		
New catch-basins, Dorchester.....	Day labor.....	\$76 20	\$141 00	217 20	Spring Garden street.....	1
New catch-basins, Dorchester.....	Day labor.....	83 68	98 55	182 23	Woodrow avenue.....	1
New catch-basins, Dorchester.....	Day labor.....	114 42	80 82	195 24	Savin Hill avenue.....	1
New catch-basins, Dorchester.....	Day labor.....	159 40	115 70	275 10	Old road.....	1
New catch-basins, Dorchester.....	Day labor.....	314 39	109 81	424 20	Wayland street.....	1
New catch-basins, Dorchester.....	Day labor.....	67 26	118 59	185 85	Dorchester avenue.....	1

Sewerage Works Loan.—*Concluded.*

DISTRICT.	Built by	BUILT IN 1917.			BUILT IN 1918.			Total Expendi- ture.	Location.	Number Catch- basins Built.	Number Catch- basins Rebuilt.
		Materials, etc.	Labor.	Con- tractor.	Material and Teaming.						
New catch-basins, Dorchester.	Day labor.		\$228 48			\$146 21	\$374 69	Stoughton street.	1		
New catch-basins, Dorchester.	Day labor.		233 52			52 44	285 96	Harvard street.	1		
New catch-basins, Dorchester.	Day labor.		113 36			94 65	208 01	Connections.			
		\$285 14	\$1,390 71			\$957 77	\$2,613 62			8	
New catch-basins, Hyde Park.	Day labor.	\$508 88					\$508 88				
New catch-basins, Hyde Park.	Day labor.		\$154 62			\$78 04	232 66	Providence street.	1		
New catch-basins, Hyde Park.	Day labor.		23 20			4 50	27 70	Connections.			
		\$508 88	\$177 82			\$82 54	\$769 24		1		
New catch-basins, Roxbury.	Day labor.	\$979 71					\$979 71				
New catch-basins, Roxbury.	Day labor.		\$72 80			\$52 10	124 90	Batavia street.	1		
New catch-basins, Roxbury.	Day labor.		293 90			83 89	377 79	Peabody street.	1		
New catch-basins, Roxbury.	Day labor.		138 36				138 36	Connections.			
		\$979 71	\$505 06			\$135 99	\$1,620 76		2		
New catch-basins, city proper.	Day labor.	\$3,244 59					\$3,244 59				
New catch-basins, city proper.	Day labor.		\$258 78			\$209 78	468 56	Albany street.	2		
New catch-basins, city proper.	Contract.		\$172 74				172 74	Mercantile street.	1		
New catch-basins, city proper.	Day labor.		340 09			200 21	600 30	Cooper street.	2		

New catch-basins, city proper.....	Day labor.....	247 78	536 36	784 14	Carleton street.....	5	1
New catch-basins, city proper.....	Day labor.....	66 00	147 74	213 74	Portland street.....		1
New catch-basins, city proper.....	Day labor.....	130 51	121 00	251 51	Kneeland street.....		1
New catch-basins, city proper.....	Day labor.....	282 12	191 00	473 12	Causeway street.....	22*	2
New catch-basins, city proper.....	Day labor.....	1,654 86	381 75	2,036 61	Atlantic avenue.....	1	
New catch-basins, city proper.....	Day labor.....	131 21	127 00	258 21	Central street.....		1
New catch-basins, city proper.....	Day labor.....	90 86	120 88	211 74	Charter street.....		1
New catch-basins, city proper.....	Contract.....	211 02		211 02	Springfield street.....		1
New catch-basins, city proper.....	Day labor.....	106 60	100 63	207 23	Tyler street.....	1	
New catch-basins, city proper.....	Day labor.....	617 50	241 00	858 50	Leverett street.....	2	
New catch-basins, city proper.....	Day labor.....	831 79	161 00	992 79	Motte street.....	1	
New catch-basins, city proper.....	Day labor.....	508 52	112 50	621 02	Massachusetts avenue.....	2	1
New catch-basins, city proper.....	Day labor.....	467 42	152 00	619 42	Devonshire street.....	2	2
New catch-basins, city proper.....	Day labor.....	303 00	89 89	392 89	Connections.....		
Grand totals.....		\$6,037 04	\$2,952 74	\$12,618 13	New basins.....	19	9
		\$12,117 57	\$6,477 54	\$26,755 57	Track inlets.....	48	10
						22	

* Track inlets.

New Catch-basins Paid for, February 1, 1918, to January 31, 1919. (Included in Other Sewer Construction.)

District.	Built by	Contractor.	Materials.	Labor.	Materials and Teaming.	Total Expenditures.	Location.	Number.
East Boston.....	Contract.....	\$375 74	\$374 40	.....	.....	\$750 14	Faywood avenue.....	3
East Boston.....	Contract.....	982 84	501 30	.....	.....	1,484 14	Saratoga street.....	5
Charlestown.....	Contract.....	752 74	400 94	.....	.....	1,153 68	Chelsea street.....	6
Brighton.....	Contract.....	770 95	148 36	.....	.....	919 31	Washington street.....	3
Brighton.....	Contract.....	119 71	72 70	.....	.....	192 41	Cambridge street.....	1
Brighton.....	Day labor.....	.....	.....	\$70 70	\$96 22	168 92	Hickborn street.....	1
West Roxbury.....	Contract.....	3,103 79	1,671 58	.....	.....	4,775 37	Washington street.....	35
West Roxbury.....	Contract.....	225 00	.....	.....	.....	225 00	Catherine street *.....	3
Dorchester.....	Contract.....	713 20	638 80	.....	.....	1,350 00	Irma street.....	9
Dorchester.....	Contract.....	627 45	456 00	.....	.....	1,083 45	Baird street.....	7
Dorchester.....	Contract.....	1,174 50	.....	.....	.....	1,174 50	Dorchester avenue *.....	11
Dorchester.....	Contract.....	717 00	.....	.....	.....	717 00	Freeport street *.....	6
Roxbury.....	Contract.....	541 23	342 61	.....	.....	883 84	Pontiac street.....	4
City proper.....	Contract.....	1,907 66	170 80	.....	.....	2,078 46	Atlantic avenue.....	7
City proper.....	Contract.....	4,577 99	765 79	.....	.....	5,343 78	{ Atlantic avenue..... Commercial street.....	8 6
City proper.....	Contract.....	735 00	.....	.....	.....	735 00	Causeway street *.....	5
City proper.....	Contract.....	667 50	.....	.....	.....	667 50	Leverett street *.....	4

City proper.....	Contract.....	12,000 00					Dartmouth street *.....	7
South Boston.....	Contract.....						Sudbury street *.....	6
South Boston.....	Contract.....						Tremont street *.....	19
							Brookline avenue *.....	2
							Eliot street *.....	1
							Broadway *.....	8
							Columbia road *.....	8
								175

* Cost not complete.

Recapitulation.

22 track inlets built	Amount Paid.
48 catch-basins built	\$26,755 57
10 catch-basins rebuilt	
175 catch-basins built included in other sewer construction.....	35,700 50
<u>255</u>	<u>\$62,456 07</u>

Separate Systems of Drainage.
Expenditures February 1, 1918, to January 31, 1919.

ACCOUNTS.	Labor.	Teaming.	Materials.	Miscellaneous.	Paid to Contractors.	Totals.
Engineers' salaries.....	\$3,543 96	.....	.....	.....	.....	\$3,543 96
Engineers' expense.....	89 55	\$106 00	.....	\$277 61	.....	473 16
Sundries.....	.....	.....	\$153 27	.....	.....	153 27
Land-takings and court executions.....	.....	.....	.....	1,145 91	.....	1,145 91
Sewers built in entire city.....	7,536 46	514 00	5,592 90	.....	\$40,137 87	53,771 23
Totals.....	\$11,159 97	\$630 00	\$5,746 17	\$1,423 52	\$40,137 87	\$59,087 53

SEPARATE SYSTEMS OF DRAINAGE EXPENDITURES FOR 1918 AND 1919.

BRIGHTON.

Academy Hill road, from Chestnut Hill avenue to William Jackson avenue	\$467 33
William Jackson avenue, from Chestnut Hill avenue and Academy Hill road	
North Beacon street, from Market street to Cambridge street	4,132 95
Parkland street, from Academy Hill road to Winship street	135 67
Academy Hill road, from Washington street to 450 feet southerly	
Chestnut Hill avenue, from Chiswick road to South street	221 65
Shepard brook, easterly branch at Seattle street,	10,433 10
Shepard brook, from Western avenue to North Harvard street	
Griggs street, from Brainerd road to Commonwealth avenue	322 69
Bellvista road, from Allston street to Brookline line	
Park Vale avenue, from Glenville avenue to Brighton avenue	395 21
Justin road, from Bigelow street to Atkins street,	102 34
Holton street, from Everett street to Antwerp street	583 91
	<u>\$16,794 85</u>

WEST ROXBURY.

Richwood, Willow and Centre streets and private land	\$15,488 77
Elmwood street brook, in private land and New Haven avenue, from New York, New Haven & Hartford Railroad to North avenue	80 28
Lorne street, from Harvard avenue to 650 feet northwesterly	121 61
Spring street brook conduit	1,452 82
Landseer street, from Centre street to La Grange street	
Private land, from La Grange street to Landseer street and west of Landseer street	
La Grange street, from 160 feet northwest of Sturgis road to 60 feet northwesterly	
Carried forward	<u>\$17,143 48</u>

<i>Brought forward</i>	\$17,143 48
Caledonian avenue, from Spring street to Hamilton street	2,134 88
Bexley road, from Florence street to Washington street	181 41
Malvern road, from Metropolitan avenue to Ethel street	213 96
Beech street, from West Roxbury Parkway to Belgrade avenue	418 98
Poplar street, from Dale street to Metropolitan avenue	2,686 46
	<hr/>
	<u>\$22,779 17</u>

Built 1,057.61 linear feet, 8 manholes, 11 catch-basins.

DORCHESTER.

Goodale road, from Blue Hill avenue to Wellington Hill street	<u>\$123 75</u>
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HYDE PARK.

Hyde Park avenue, from Metropolitan avenue to River street	<u>\$7,024 02</u>
Metropolitan avenue, from Hyde Park avenue to 100 feet westerly	
Passageway opposite Winthrop street, from Hyde Park avenue to Providence street	
Providence street, from passageway about 225 feet northerly	

ROXBURY.

Overland street, from Brookline avenue to Boston & Albany Railroad	<u>\$303 07</u>
Museum road, from Huntington avenue to Fenway	
Public Alley 821, from Gainsborough street to Public Alley 820	674 82
Public Alley 820, from Huntington avenue to St. Botolph street	
Public Alley 818, from Public Alley 819 to 200 feet easterly	3,949 60
Public Alley 819, from Westland avenue to Public Alley 818	
	<hr/>
	<u>\$4,927 49</u>

Built 328 linear feet, 3 manholes, 2 catch-basins.

CITY PROPER.

Back street, from Hereford street to Fairfield street	\$230 05
Berkeley street, from Columbus avenue to Boston & Albany Railroad	339 99
Revere street, from Irving street to Garden street,	1,551 91
	<u>\$2,121 95</u>

Built 136.28 linear feet, 3 manholes, 3 catch-basins.

SEPARATE SYSTEMS OF DRAINAGE.

Engineers' salaries, general	\$3,543 96
Amount charged to construction of sewers	501 60
	<u>\$4,045 56</u>

ENGINEERS' EXPENSE.

Labor	\$89 55
Teaming	106 00
Borings	176 00
Transportation	66 91
Photographs	33 60
Supplies	1 10
	<u>\$473 16</u>

COURT EXECUTIONS AND AWARDS ON ACCOUNT OF
LAND-TAKINGS, ETC.

M. E. Conway, court execution, Spring street	\$545 91
W. T. McLaughlin Company, court execution, Willow street	500 00
M. J. Crowley, Street Commissioners' award, Kittredge street	100 00
	<u>\$1,145 91</u>

SUNDRIES.

Stock	<u>\$153 27</u>
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Separate Systems of Drainage.

New Catch-basins paid for, February 1, 1918, to January 31, 1919 (included in other sewer construction).

District.	Built by	BUILT IN 1918.				Total Expenditures.	Location.	Number.
		Contractor.	Materials.	Labor.	Materials and Teaming.			
New catch-basins, West Roxbury.....	Contract.....	\$585 00				\$585 00	Centre street.....	7
New catch-basins, West Roxbury.....	Day labor.....			\$428 90	\$371 75	800 65	Poplar street.....	4
New catch-basins, Roxbury.....	Contract.....	208 37	\$161 93			370 30	Public Alley No. 818.....	1
New catch-basins, city proper.....	Day labor.....			1,012 00	420 50	1,432 90	Public Alley No. 819.....	1
							Revere street.....	3
Totals.....		\$793 37	\$161 93	\$1,440 90	\$792 65	\$3,188 85		16

ENTRANCE FEES, PERMITS AND ASSESSMENTS.

Entrance fees to the amount of \$1,880.26 have been deposited with the City Collector for collection from estates upon which no sewer assessment was ever paid, in accordance with the Ordinances of 1910, chapter 9, section 10.

Bills for sewer assessments amounting to \$1,229.90 have been deposited for collection, representing those estates assessed under chapter 456 of the Acts of 1889, and other acts, which have been connected during the year with the sewers for which they were assessed.

Eleven hundred and thirty-three permits have been issued, viz., 248 to district foremen, 221 to contractors and 664 to licensed drainlayers, for repairing or laying house drains and the work done under these permits has been inspected.

Plans for the assessment of estates for sewer construction have been furnished the Street Commissioners, representing 39,248 feet of sewers and appurtenances, costing \$274,834.08.

**Cost of Maintaining all Horses in the Sewer Service from
February 1, 1918, to January 31, 1919.**

ITEMS.	Total Cost.	28 Horses. Average Cost per Day.
Labor.....	\$8,991 21	\$0 879
Hay and grain.....	8,885 10	869
Shoeing.....	1,474 23	144
Veterinary service, medicine and clipping.....	335 00	0327
Stable goods.....	50 95	005
Totals.....	\$19,736 49	\$1 9297

**Summary of Sewer Construction for the Year Ending
January 31, 1919.**

DISTRICT.	Built by the City by Contract or Day Labor.	Built by Private Parties.	TOTAL LENGTH BUILT.	
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Miles.</i>
City proper.....	1,994.37	.....	1,994.37	0.377
Roxbury.....	514.43	.....	514.43	0.097
South Boston.....	.....	5,406.00	5,406.00	1.024
East Boston.....	1,851.50	.....	1,851.50	0.350
Charlestown.....	4,098.70	.....	4,098.70	0.776
Brighton.....	8,376.67	.....	8,376.67	1.586
West Roxbury.....	4,408.61	.....	4,408.61	0.835
Dorchester.....	9,276.68	.....	9,276.68	1.760
Hyde Park.....	1,243.88	.....	1,243.88	0.235
Totals.....	31,764.84	5,406.00	37,170.84	7.040

Schedule of Sewers Built to February 1, 1919, in City of Boston.

DISTRICT.	Length of Sewers Built During the Year Ending January 31, 1919.	Length of Sewers Re- built or Abandoned During the Year Ending January 31, 1919.	Additional Lengths of Sewers for the Year Ending January 31, 1919.	
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Miles.</i>
City proper.....	1,994.37	1,914.89	79.48	0.015
Roxbury.....	514.43		514.43	0.097
South Boston.....	5,406.00		5,406.00	1.024
East Boston.....	1,851.50	125.00	1,726.50	0.327
Charlestown.....	4,098.70	875.09	3,223.61	0.610
Brighton.....	8,376.67	547.00	7,829.67	1.483
West Roxbury.....	4,408.61	345.40	4,063.21	0.771
Dorchester.....	9,276.68	1,852.45	7,424.23	1.406
Hyde Park.....	1,243.88		1,243.88	0.235
Totals.....	37,170.84	5,659.83	31,511.01	5.968
<i>Total Lengths Built.</i>				<i>Miles.</i>
Common sewers and surface drains built previous to January 31, 1918.....				924.34
Common sewers and surface drains built between February 1, 1918, and January 31, 1919.....				5.97
Total common sewers and surface drains built to January 31, 1919....				930.31
Intercepting sewers connecting with metropolitan system built to Janu- ary 31, 1919.....				* 6.81
Boston main drainage intercepting sewers to January 31, 1919.....				* 24.12
Grand total of common and intercepting sewers built to January 31, 1919				961.24
Total mileage of streets containing sewerage works.....				575.12

* No addition built during 1918.

Summary of Sewer Construction for Five Years Previous to
February 1, 1919.

	1914.	1915.	1916.	1917.	1918.
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>
Built by the city by contract or day labor.....	125,768.31	123,717.66	91,421.56	80,828.46	31,764.84
Private parties.....	14,810.40	19,009.86	11,113.54	4,155.90	5,406.00
Totals.....	140,578.71	142,727.52	102,535.10	84,984.36	37,170.84

**Schedule of Catch-basins in Charge of Sewer Service, City of
Boston, February 1, 1919.**

	New catch-basins built.	Old catch-basins abandoned or removed.	Net increase during the year 1918-19.	Totals in the city to February 1, 1918.	Catch-basins not previously listed.	Totals to February 1, 1919.
City proper.....	83	43	40	3,095	.....	3,135
Roxbury.....	22	10	12	2,751	.....	2,763
South Boston.....	19	6	13	1,205	.....	1,218
East Boston.....	9	.....	9	841	.....	850
Charlestown.....	7	.....	7	726	4	737
Brighton.....	7	.....	7	1,172	.....	1,179
West Roxbury.....	44	.....	44	1,810	5	1,859
Dorchester.....	37	.....	37	3,306	.....	3,343
Hyde Park.....	1	.....	1	351	.....	352
Totals.....	229	59	170	15,257	9	15,436

EQUIPMENT OF PUMPING STATIONS.

Calf Pasture Pumping Station.

One vertical beam and fly-wheel, triple expansion engine of the Leavitt type; cylinders $18\frac{1}{2}$ inches, 33 inches and $52\frac{3}{4}$ inches in diameter; two single-acting pump plungers, each 60 inches diameter and 120-inch stroke; capacity 72,000,000 gallons in twenty-four hours with 40-foot lift.

Two vertical beam and fly-wheel compound engines of the Leavitt type; cylinders $25\frac{1}{2}$ inches and 52 inches in diameter; two single-acting pump plungers, each 48 inches in diameter and 108-inch stroke; capacity of each engine 35,000,000 gallons in twenty-four hours with 40-foot lift.

Two steam turbine driven centrifugal pumps of the DeLaval type, with a capacity of 56,000,000 gallons each in twenty-four hours with 40-foot lift.

Total horse power pumping engines, 2,050.

Total horse power station, including auxiliaries, 2,200.

Summer Street Pumping Station (Automatic).

Two submerged centrifugal pumps of the single stage, single bottom suction vertical type. Capacity of each

pump, 3,000 gallons per minute against 13-foot static head when running 675 revolutions per minute.

Motor for each pump is a 20-brake horse power, 220 volts, 60-cycle, 3-phase vertical constant speed induction motor* of the squirrel cage type.

Union Park Street Pumping Station (Automatic).

One 24-inch vertical submerged centrifugal pump, capacity 15,000 gallons per minute against static head of $13\frac{1}{2}$ feet when running 233 revolutions per minute.

Three 36-inch vertical submerged centrifugal pumps, capacity of each 30,000 gallons per minute against a static head of $13\frac{1}{2}$ feet when running 194 revolutions per minute.

Motor for 24-inch pump is one 75-brake horse power, constant speed, squirrel cage, 3-phase alternating current induction motor; synchronous speed of 240 revolutions per minute, full load speed of 233 revolutions per minute, with alternating, 3-phase, 60-cycle current at 440 volts.

Motors for the three 36-inch pumps are each 150-brake horse power, with synchronous speed of 200 revolutions per minute, full load speed of 194 revolutions per minute; same description of motor and of current as for the 75-brake horse power motor.

Hyde Park Pumping Station (Automatic).

One 3-B Priestman Ejector, capacity 100 gallons per minute against a static head of $12\frac{1}{2}$ feet, with two gates, one inlet flap valve, one outlet check valve and one operating valve.

One Worthington $7\frac{1}{2}$ horse power motor.

COST OF PUMPING.

Average cost per million foot-gallons for pumping; volume (37,605.74 million gallons) by (=times) lift (39.3 feet) = 1,477,905.582 million foot-gallons for the year.

Labor cost included in total is based upon the following force of forty-nine men:

One superintendent, one chief engineer, one clerk, one storekeeper, one electrician, one carpenter, one blacksmith, two machinists, four laborers and four "engineers' watches," each including nine men.

Cost of city water not included.

Items.	Cost.	Cost per Million Foot-Gallons.
Labor.....	\$57,347 88	\$0 0388
Coal.....	88,445 42	05984
Oil and waste.....	2,277 60	00154
Rubber valves and packing.....	3,666 84	00248
Miscellaneous supplies and renewals.....	14,773 22	00999
Totals.....	\$166,510 96	\$0 11266
Labor at screens.....	\$5,718 00	\$0 00386

Table of Approximate Quantities, Lifts and Duties at Calf Pasture Pumping Station.

MONTH.	Total Pumpage. Gallons.	Average per Day. Gallons.	Minimum Day. Gallons.	Maximum Day. Gallons.	Average Lift. Feet.	Average Duty Foot-Pounds per 100 Pounds of Coal.
1918.						
February.....	3,521,967,653	125,784,559	97,164,576	197,204,921	39.3	82,100,000
March.....	3,465,076,101	111,776,648	87,721,232	173,930,718	39.3	84,000,000
April.....	3,266,694,567	108,889,819	83,111,696	147,345,218	39.3	83,200,000
May.....	2,959,569,937	95,469,998	84,243,312	138,863,112	39.3	80,600,000
June.....	2,806,141,991	93,538,066	72,732,590	137,841,271	39.3	78,000,000
July.....	2,773,544,224	89,469,169	81,430,171	116,286,425	39.3	79,800,000
August.....	2,568,946,884	82,869,254	67,393,735	113,767,995	39.3	80,800,000
September.....	3,209,877,285	106,995,909	73,779,070	168,201,547	39.3	76,600,000
October.....	2,869,337,082	92,559,261	82,334,462	107,752,188	39.3	72,100,000
November.....	3,085,490,452	109,849,681	83,377,080	138,524,040	39.4	60,400,000
December.....	3,121,540,655	100,694,860	84,153,830	145,385,916	39.3	73,300,000
1919.						
January.....	3,957,554,346	127,663,043	104,025,413	181,622,766	39.4	76,100,000
Totals.....	37,605,741,177	1,245,560,267	1,001,467,167	1,766,729,117		
Averages.....	103,029,428	103,796,689	83,455,597	147,227,426	39.3	77,200,000

**Amount of Sludge Received and Removed from Deposit Sewers
from February 1, 1918, to January 31, 1919, Inclusive.**

MONTH.	Cubic Yards Received.	Cubic Yards Removed.	
1918.			
February.....	85		Sludge in sewers February 1, 1918, 3,690 cubic yards.
March.....	170	85	
April.....	175	85	
May.....	52*	85	
June.....	32	170	
July.....	191	255	
August.....	20	85	
September.....	320	170	
October.....	338	170	
November.....	286	255	
December.....	499	170	
1919.			
January.....	60	85	Sludge in sewers February 1, 1919, 4,199 cubic yards.
Totals.....	2,124	1,615	

* Decrease.

**Amount of Refuse Removed from Gatehouse from February 1,
1918, to January 31, 1919, Inclusive.**

MONTH.	
1918.	
February.....	185 cheeses, or 20 tons, 1,255 pounds.
March.....	292 cheeses, or 32 tons, 1,116 pounds.
April.....	256 cheeses, or 28 tons, 1,088 pounds.
May.....	255 cheeses, or 28 tons, 865 pounds.
June.....	203 cheeses, or 22 tons, 1,269 pounds.
July.....	277 cheeses, or 30 tons, 1,661 pounds.
August.....	270 cheeses, or 30 tons, 110 pounds.
September.....	192 cheeses, or 21 tons, 816 pounds.
October.....	267 cheeses, or 29 tons, 1,581 pounds.
November.....	217 cheeses, or 24 tons, 381 pounds.
December.....	206 cheeses, or 22 tons, 1,938 pounds.
1919.	
January.....	200 cheeses, or 22 tons, 600 pounds.
Totals.....	2,820 cheeses, or 314 tons, 680 pounds.

NOTE.— Average, 223 pounds to a cheese. Coal used, 46 tons, 1,085 pounds.

SANITARY SERVICE.

FINANCIAL STATEMENT.

Appropriation (maintenance)	\$1,127,386 08
Expended during the year	1,106,933 20
Unexpended balance transferred to city treasury,	<u>\$20,452 88</u>

SPECIAL APPROPRIATIONS.

Refuse Destructor Site, Spectacle Island.

Balance February 1, 1918	\$15,000 00
Transferred from other appropriations	67,500 00
Total	<u>\$82,500 00</u>

Expended during the year (execution of court)	<u>\$82,500 00</u>
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Refuse Transfer Station.

Balance February 1, 1918	<u>\$271 66</u>
Transferred to Refuse Destructor Site, Spectacle Island	<u>\$271 66</u>

INCOME.

Statement showing amount of cash and bills deposited with the City Collector from February 1, 1918, to January 31, 1919, and credited to general revenue.

Tickets for the removal of ashes and waste	\$72,184 60
Sale of old scow	50 00
Removal of dead horses	21 00
Manure	618 26
Work done and materials furnished at shops	296 37
Care of sick horses	76 50
	<u>\$73,246 73</u>

AMOUNT PAID INTO THE CITY TREASURY DURING THE YEAR.

Removal of ashes and waste	\$72,140 77
Manure	567 47
Sale of old scows	50 00
Removal of dead horses	21 00
Injury to horse	50 00
Refund of amount drawn to pay annuity	25 00
Damage to cart	1 00
	<hr/>
	\$72,855 24

Total Cost of House Dirt, Waste, Rubbish and House Offal, 1918.

Salaries of division engineer, supervisor and medical inspector	\$4,370 10
Office supplies and expenses, printing, stationery, etc.	3,594 41
Ashes, waste and rubbish account	723,364 87
House offal account	287,696 69
Annuities	\$525 00
Retired veterans' pension	3,767 35
Retired laborers' pension	15,356 24
	<hr/>
	19,648 59
	<hr/>
	\$1,038,674 66

**CONSTRUCTION REPAIRS AND HORSESHOEING
ACCOUNT.**

Expended for labor	\$64,159 69
Expended for stock	21,958 85
	<hr/>
	86,118 54
	<hr/>
	\$1,124,793 20

WORK DONE FOR OTHER SERVICES.

Bridge Service	\$211 26
Paving Service	4,851 50
Sewer Service	1,149 57
Street Cleaning Service	8,722 49
Water Service	2,905 18
	<hr/>
	17,840 00
	<hr/>
	\$1,106,953 20

Items of Expenditure for the Year 1918-19.

Salary, division engineer (in part)	\$1,250 00
Salary, medical inspector (in part)	374 98
Salary, chief veterinarian (in part)	1,000 00
Salary, supervisor (in part)	1,745 12
Salaries, yard clerks	385 32
Salaries, foremen	12,565 28
Labor, collecting and disposing of house dirt and ashes	307,994 24
Labor, collecting and disposing of waste and rubbish	28,818 80
Labor, collecting and disposing of house offal	167,817 11
Labor and stock at stables and yards	61,289 58
Hired teams on ashes	104,596 72
Hired teams on offal	5,183 00
Contractor on ashes, East Boston, Brighton, West Roxbury and Dorchester ..	148,474 41
Contractor on offal, East Boston, Brighton, West Roxbury and Dorchester ..	53,934 23
Holidays, pay allowed	28,264 52
Vacations, pay allowed	10,543 40
Grain	30,283 26
Hay and straw	23,783 19
Medical attendance and pay allowed injured employees	9,541 57
Veterinary services and medicines	565 33
Horses, purchase of	3,500 00
Outside board of horses	535 00
Outside wheelwright, blacksmith, horseshoeing, etc.	7,930 80
Labor and wheelwright, blacksmith, painting, etc.	59,609 82
Repairs to stable and sheds	1,519 51
Fuel	2,502 96
Gas	473 42
Electric light and power	2,465 09
Printing, stationery, office supplies, etc.	2,695 65
Automobile expense	5,214 76

AUTOMOBILES.	South Boston. Electric Truck.	Roxbury. Electric Truck.	Roxbury. Ford.	South End. Truck.	West End. Ford.	Total.
Cost					\$379 07	\$379 07
Supplies	\$238 93	\$232 66	\$150 35	\$309 74	143 03	1,074 71
Repairs	669 50	1,079 99	187 02	96 19	217 94	2,250 64
Tires and tubes		105 17	24 90	32 48	43 58	203 13
Gas			67 20	96 57	76 44	240 21
Chauffeurs' wages	521 00	546 00				1,067 00
Totals	\$1,429 43	\$1,963 82	\$429 47	\$534 98	\$857 06	\$5,214 76

Telephone tolls and rentals	1,902 54
Annuities	525 00
Retired veterans' pension	3,767 35
Retired laborers' pension	15,356 24
	\$1,106,953 20

Construction and Repair Shops, 1918-19.

For work done and materials furnished for other services and for the Sanitary Service the different shops received and expended the following amounts:

	STOCK AND LABOR.		Total.
	Other Services.	Sanitary.	
Wheelwright.....	\$2,657 30	\$13,606 78	\$16,264 08
Blacksmith.....	5,016 75	15,260 50	20,277 25
Paint.....	5,447 72	9,015 34	14,463 06
Harness.....	2,651 05	12,558 37	15,209 42
Horseshoeing — South End,	1,071 18	4,412 63	5,483 81
Horseshoeing — West End..	561 00	2,331 06	2,892 06
Horseshoeing — Roxbury...	435 00	1,279 20	1,714 20
Totals, stock and labor,	\$17,840 00	\$58,463 88	\$76,303 88

Foreman	\$1,795 04	
Stockkeeper	1,145 94	
Express teamster	916 99	
Allowed time, holidays	3,375 91	
Allowed time, vacations	1,218 40	
Medical attendance	420 14	
Electric power	407 26	
Auto truck	534 98	
		\$9,814 66
Total cost, maintenance		\$86,118 54
Income from other services		17,840 00
Net cost of shops		\$68,278 54

Detailed Accounts of Amounts Paid to the Sanitary Service During Year Ending January 31, 1919, by the Payment of Bills and Pay Rolls.

For repair and construction work	\$18,150 88
For horseshoeing	2,618 98
For hay, straw, grain and board and care of horses,	1,040 00
For feeders, stablemen and watchmen	1,040 00
For furnishing of prison vans and painting	25 16
	<u>* \$22,875 02</u>

* Includes bill paid by the County of Suffolk for stock and labor, \$2,758.47, and bills paid by other services for stock, \$2,276.55.

Horseshoeing by Services.

KINDS AND STYLES.	Sanitary Service.	Street Cleaning and Oiling Service.	Paving Service.	Sewer Service.	Water Service.	Bridge Service.	County of Suffolk.	Totals.
Plain shoes.....	5,447	3,835	398	248	361	94	139	10,522
Bar shoes.....	357	263	24	64	14	10	19	751
Rim shoes.....	20	64	8	4	12	.....	.....	108
Leathers.....	5,117	3,101	152	112	162	26	25	8,695
Resets.....	1,444	772	35	20	55	8	40	2,374
Pads.....	158	375	84	58	14	20	90	799

Cost of Horseshoeing.

	Division Shops.	Outside Shops.
Stock.....	\$3,288 06	\$2,885 66
Labor.....	4,734 83	
Totals.....	\$8,022 89	\$2,885 66

Amount Expended for the Collection and Disposal of Ashes, Garbage, Waste and Rubbish, by Districts.

Districts.	Popula- tion.	ASHES.		GARBAGE.		WASTE AND RUBBISH.		Total Cost.	Total Cost per Capita.
		Cost.	Per Capita.	Cost.	Per Capita.	Cost.	Per Capita.		
1. South Boston.....	79,321	\$38,790 89	\$0 4890	\$18,796 90	\$0 2369	\$553 50	\$0 0069	\$58,141 29	\$0 7328
2. East Boston.....	70,031	16,714 24	0 2387	7,293 45	0 1041	.....	.....	24,007 69	0 3428
3. Charlestown.....	42,225	20,329 08	0 4809	10,431 37	0 2470	.....	.....	30,760 45	0 7279
4. Brighton.....	37,085	36,740 37	0 9907	7,893 92	0 2128	.....	.....	44,634 29	1 2035
5. West Roxbury.....	55,451	33,079 03	0 5966	13,373 60	0 2411	1,558 00	0 0281	48,010 63	0 8658
6. Dorchester.....	146,973	90,505 14	0 6157	40,593 00	0 2762	.....	.....	131,098 14	0 8919
7. Roxbury.....	134,027	122,777 00	0 9160	52,868 43	0 3944	4,844 00	0 0361	180,489 43	1 3465
8 and 9. South End and Back Bay...	121,984	134,085 26	1 0992	41,786 79	0 3425	28,613 38	0 2346	204,485 43	1 6763
10. North and West Ends.....	88,950	103,852 92	1 1676	16,801 42	0 1866	7,341 74	0 0825	127,796 08	1 4367
12. Hyde Park.....	18,759	4,852 94	0 2587	2,941 88	0 1568	.....	.....	7,794 82	0 4155
Disposal station.....	.....	76,611 45	.....	75,115 93	.....	2,115 93	.....	153,843 31	.....
Totals.....	794,816	\$678,338 32	.....	\$287,696 69	.....	\$45,026 55	.....	\$1,011,061 56	.....

Force Employed on House Dirt and Ashes January 31, 1919.

CITY FORCE.	Number.	Hired Teams.	East Boston.	Brighton.	West Roxbury.	Dorchester.	Hyde Park.	Total.
Inspectors.....	28	.....	.....	.....	.....	.....	.....	28
Teamsters.....	83	35	4	8	5	16	2	153
Helpers.....	102	92	11	12	10	36	4	267
Dumpers.....	1	.....	.....	.....	.....	.....	.....	1
Totals.....	214	127	15	20	15	52	6	449

Force Employed on House Offal January 31, 1919.

CITY FORCE.	Number.	Hired Teams.	East Boston.	Brighton.	West Roxbury.	Dorchester.	Hyde Park.	Total.
Inspectors.....	11	.....	.....	.....	.....	.....	.....	11
Teamsters.....	41	2	3	2	3	5	1	57
Helpers.....	43	3	3	4	6	15	2	76
Totals.....	95	5	6	6	9	20	3	144

Force Employed on Waste and Rubbish January 31, 1919.

CITY FORCE.	Number.
Inspectors.....	1
Teamsters.....	14
Helpers.....	20
Total.....	35

Amount of House Dirt and Ashes Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1914.....	273,405	760,848	358,740
1915.....	262,235	748,992	353,138
1916.....	238,261	795,862	324,313
1917.....	231,999	796,033	324,384
1918.....	217,823	776,645	316,482

Amount of House Offal Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1914.....	51,523	112,847	76,172
1915.....	50,482	113,348	76,511
1916.....	48,329	118,770	70,075
1917.....	40,729	102,449	60,744
1918.....	39,494	96,317	56,836

Amount of Waste and Rubbish Removed.

YEARS.	LOADS.		Cubic Yards.	Tons.
	Paper Carts.	Market Wagons.		
1914.....	1,691	8,722	82,978	10,778
1915.....	2,212	6,948	70,779	9,192
1916.....	4,302	7,031	79,909	10,744
1917.....	3,242	4,888	68,047	8,014
1918.....	3,186	4,823	64,221	7,546

Number of Loads of Material Collected from February 1, 1914, to January 31, 1919.

YEARS.	Ashes.	Offal.	Rubbish.	Total Loads.	Tons.
1914.....	273,405	51,523	10,413	335,341	445,690
1915.....	262,235	50,482	9,160	321,877	438,841
1916.....	238,261	48,329	11,333	297,923	405,132
1917.....	231,999	40,729	9,073	281,801	393,132
1918.....	217,823	39,494	8,009	265,326	380,864

Capacity of the Carts and Wagons Used by Sanitary Service, 1918.

	Pounds.	Cubic Feet.
Single ash carts.....	2,038	67.5
Double ash carts (city).....	4,075	135
Double ash carts (contractor).....	4,075	135
Paper carts.....	1,400	148
Paper wagons.....	2,200	219
Single offal wagons.....	2,260	54
Double offal wagons.....	4,130	94
Auto.....	8,150	270

Collected by Contract.

DISTRICTS.	ASHES.				OFFAL.		
	Double Loads.	Auto Loads.	Cubic Yards.	Tons.	Double Loads.	Cubic Yards.	Tons.
East Boston.....	8,458	.....	42,290	17,233	1,355	4,743	2,798
Brighton.....	13,914	.....	69,570	28,350	2,016	7,056	4,163
West Roxbury.....	6,611	.....	33,055	13,470	1,023	3,571	2,107
Dorchester.....	20,970	2,928	134,130	54,658	4,944	17,304	10,219
Hyde Park.....	2,988	.....	14,940	6,088	468	1,638	966
Totals.....	52,941	2,928	293,985	119,719	9,806	34,312	20,253

Summary.

MATERIAL.	Cubic Yards.	Tons.
Ashes.....	293,985	119,799
Offal.....	34,312	20,253

Loads and Tonnage of Material Collected, by Districts.

Class of Refuse.	1. South Boston.	2. East Boston.	3. Charlestown.	4. Brighton.	5. West Roxbury.	6. Dorchester.	7. Roxbury.	8-9. South End and Back Bay.	10. North and West Ends.	11. Hyde Park.	Total Tons. (2,000 Pounds.)	Total Loads.	Cubic Yards.
House dirt and ashes:													
Loads.....	18,262	8,458	9,248	13,914	11,062	23,898	42,526	50,664	36,803	2,988	.....	217,823	776,645
Tons.....	20,891	17,233	9,451	28,350	21,637	54,658	51,006	60,413	46,755	6,088	316,482	.....	.....
Offal:													
Loads.....	3,327	1,355	1,453	2,016	1,728	4,944	8,477	11,378	4,353	468	.....	39,494	96,317
Tons.....	4,016	2,798	1,715	4,163	3,355	10,219	11,041	13,426	5,137	966	56,836	.....	.....
Waste and rubbish:													
Loads.....	211	.....	.....	.....	519	.....	1,186	4,875	1,218	.....	.....	8,006	60,089
Tons.....	185	.....	.....	.....	487	.....	1,282	4,252	1,340	.....	7,546	.....	.....
Totals {Loads.....	21,800	9,813	10,701	15,930	13,304	28,842	52,189	66,917	42,374	3,456	.....	265,326	933,051
{Tons.....	25,092	20,031	11,166	32,513	25,479	64,877	63,329	78,091	53,232	7,054	390,864	.....	.....

**Final Disposition of all Material, in Loads and Tons (2,000 Pounds),
Collected by the Sanitary Service, February 1, 1918, to Janu-
ary 31, 1919.**

CLASS OF REFUSE.	Boston Development and Sanitary Company.	Collected and Disposed of by Contractors.	Total Number of Loads Disposed of.	Total Tons.
House dirt and ashes.....{	161,954	55,869	217,823	316,482
	196,683	119,799	.....
Offal.....{	29,688	9,806	39,494	56,836
	36,583	20,253	.....
Waste and Rubbish.....{	8,009	.....	8,009	7,546
	7,546	.....	.....
Totals { Loads.....	199,651	65,675		
{ Tons.....	240,812	140,052	265,326	380,864

NOTE.—First item, loads. Second item, tons.

Cost of Collection and Disposal of Refuse by Contract in the City of Boston for the Year 1918-19.

Contract Districts and Population.	CHARACTER OF REFUSE.	Tons (2,000 lbs.)	Total Tons.	Cost per Ton by Districts; Collection and Disposal.	Cost by Districts.			Where Disposed of.
					Cost.	Total Cost.	Total Cost per Capita.	
2. (70,031)	Mixed refuse, principally ashes (no kitchen wastes)	17,233		\$0 0098	\$16,714 24			Inland dumps.
	Garbage, principally kitchen wastes	2,798	20,031	2 6059	7,293 45	\$24,007 69	\$0 3428	*
				Av. \$1 1486				
4. (37,085)	Mixed refuse, principally ashes (no kitchen wastes)	28,350		\$1 2959	\$36,740 37			Inland dumps.
	Garbage, principally kitchen wastes	4,163	32,513	1 8962	7,893 92	44,634 29	1 2035	*
				Av. \$1 3728				
5. (30,837)	Mixed refuse, principally ashes (no kitchen wastes)	13,470		\$0 9571	\$16,892 89			Inland dumps.
	Garbage, principally kitchen wastes	2,107	15,577	2 3737	5,001 40	17,894 29	0 5799	*
				Av. \$1 1487				
6. (146,973)	Mixed refuse, principally ashes (no kitchen wastes)	54,658		\$1 5556	\$80,505 14			Boston Development and Sanitary Company.†
	Garbage, principally kitchen wastes	10,219		5 9188	60,484 64			
	Store refuse and paper		64,877			150,989 78	1 0273	
Hyde Park (18,759)	Mixed refuse, principally ashes (no kitchen wastes)	6,088		\$0 7971	\$4,852 94		0 4155	Inland dumps.
	Garbage, principally kitchen wastes	966	7,054	3 0454	2,941 88	7,794 82		*
				Av. \$1 1090				
303,705	Totals		140,052			\$245,320 87	\$0 8077	

* Removed beyond city limits and presumably fed to swine.

† Contract for disposal.

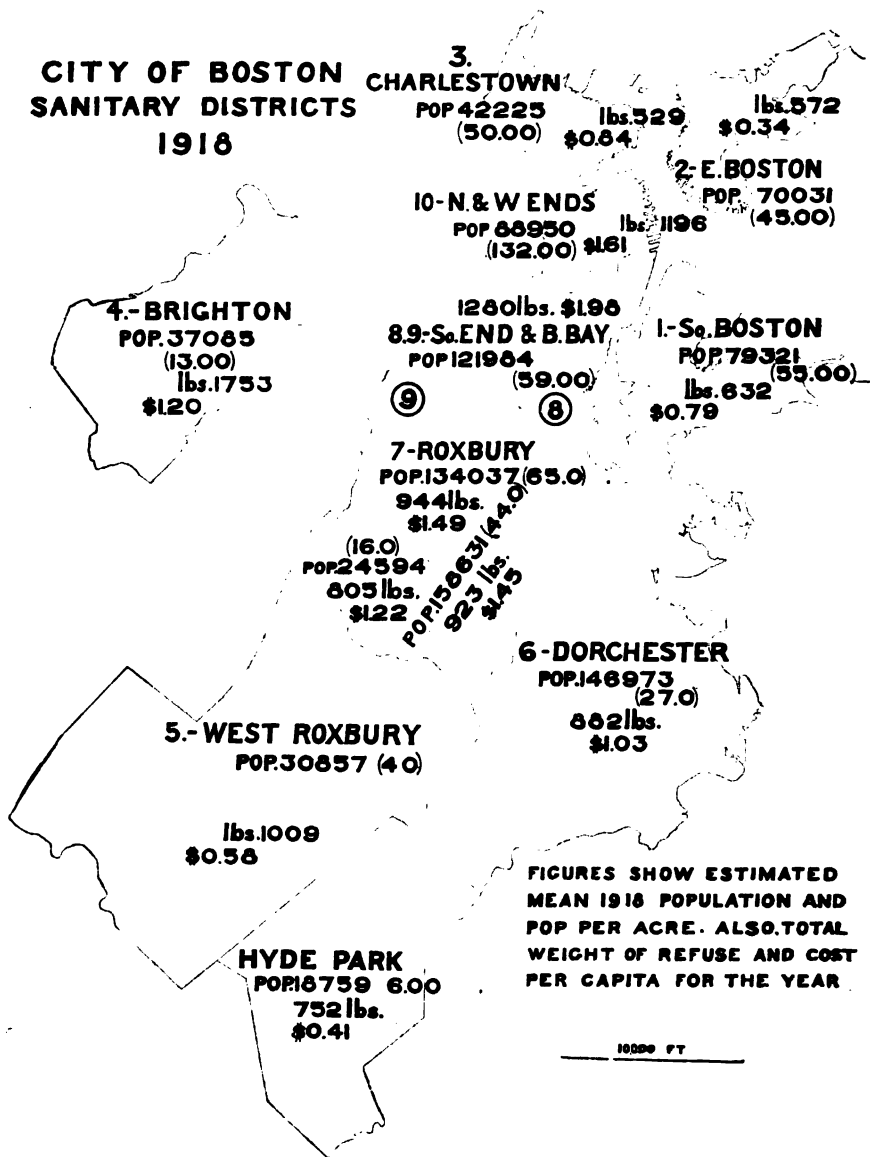
Total as above \$245,320 87
 Add total of day labor table (between pages 502 and 503) 861,632 33
 Net amount of appropriation \$1,106,953 20

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Number of Carts, Wagons and Sleds Used by the Sanitary Service for the Collection of House Dirt and Ashes, Waste and Rubbish and Garbage During the Year Ending January 31, 1919.

DISTRICTS.	ASH CARTS.			OFFAL WAGONS.				PAPER.		CONTRACTORS	
	WOOD.			IRON.		WOOD.		Carts.	Wagons.		
	Auto.	Single.	Double.	Single.	Double.	Single.	Double.				
1. South Boston	1	15	.....	6	.....	1	.....	1	1	16	.....
3. Charlestown .....	.....	12	.....	4	.....	.....	.....	.....	.....	9	.....
7. Roxbury	1	41	7	15	1	5	5	2	2	35	9
8. South End Shop .....	.....	27	.....	4	9	1	5	.....	2	.....	.....
10. North and West Ends .....	.....	34	.....	8	.....	.....	.....	2	4	5	.....
8 and 9. South End .....	.....	51	.....	19	1	.....	.....	6	10	24	2
Total number used by Sanitary Service	2	180	7	56	11	7	10	11	19	99	11
IN USE BY CONTRACTORS.											
2. East Boston .....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
2. East Boston .....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
4. Brighton .....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....
4. Brighton	2	.....	.....	.....	.....	.....	4	.....	.....	.....	.....
5. West Roxbury .....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
5. West Roxbury .....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....
6. Dorchester .....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....
6. Dorchester .....	.....	.....	.....	2	10	.....	.....	.....	.....	.....	.....
11. Hyde Park .....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
11. Hyde Park .....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....
Totals	4	180	48	58	22	7	24	11	19	99	11

CITY OF BOSTON SANITARY DISTRICTS 1918



SEWER AND SANITARY DIVISION — STREET CLEANING AND OILING SERVICE.

Items of Expenditure for Year 1918.

Street Cleaning Service.

General administration		\$22,496 66
Salary of division engineer (in part),	\$1,012 50	
Salary of supervisor (in part)	1,413 55	
Salary of medical inspector (in part),	404 99	
Salary of veterinarian (in part)	810 00	
Printing	813 84	
Stationery	150 31	
Telephone	613 47	
Postage	109 80	
Incidentals	227 57	
Auto repairs and maintenance	2,032 57	
Annuity, chapter 569, Acts of 1898,	300 00	
Pensions, retired veterans	5,250 33	
Pensions, retired laborers	9,357 73	
<hr/>		
General expenses other than general adminis- tration		125,963 08
Wages of stablemen	\$34,683 71	
Wages of yardmen	6,829 13	
Wages of watchmen	4,763 52	
Wages of foremen's drivers	583 59	
Wages of yard clerk and messengers,	2,369 94	
Hay and straw	21,448 43	
Grain	33,299 60	
Wagon and carriage repairs	869 39	
Harnesses, new and repairs	1,832 45	
Horseshoeing	4,904 05	
Stables and yards, rent and taxes	3,810 85	
Stables and yards, blankets, cover- ings, brushes, oils, greases, polishes, furnishings	2,110 50	
Stables and yards, building repairs,	1,636 21	
Electric light	350 96	
Gas	28 93	
Fuel	664 38	
Veterinary services and medicines	374 12	
<hr/>		
Carried forward	\$120,559 76	\$148,459 74

<i>Brought forward</i>	\$120,559 76	\$148,459 74
* Automobile repairs and maintenance	1,806 22	
Automobile sanitary service	64 10	
Board of horses	33 00	
Horses (new)	3,500 00	
	<hr/>	
Operating expenses		454,968 70
District foremen, salaries of	\$17,950 04	
Inspectors, wages of, on paved streets, crossings, snow work, patrolling, gutters, etc.	30,885 29	
Laborers, wages of, on paved streets, snow work, crossings, patrolling, gutters, etc.	296,665 27	
Hired teams, on paved streets, gutters, crossings, snow work, etc.,	26,371 88	
Holiday pay allowed	33,665 01	
Vacations	14,031 27	
Pay allowed injured employees	2,442 84	
Military roll	334 08	
Dumps, labor on	774 96	
Dumps, rent of	903 90	
Snow license (part cost)	500 00	
Flushing machines, repairs	1,807 54	
Sweeping machines, repairs	1,786 63	
Water carts	951 24	
Cart repairs	5,806 48	
Snow plows, road machines	591 30	
Push brooms, team brooms, handles, etc.	3,547 19	
Hoes, shovels, picks, etc.	1,182 75	
Machine brooms	6,002 00	
Push cart and barrels	1,616 26	
Refuse boxes	658 26	
Tool repairs	260 95	
Flushing hose	290 89	
Water cart hose	298 82	
Snow dump	768 50	
Sand barrels	66 66	
Sand	728 34	
Squeegees	300 00	
* Automobile repairs and maintenance	2,350 13	
Street repairs	446 11	
Paint, etc.	855 11	
Hose	129 00	
	<hr/>	
Total		<u>\$603,428 44</u>

* See pages 516 and 517 for details of automobile costs.

Street Watering and Oiling Branch.

General administration		\$5,243 15
Salary of division engineer (in part),	\$237 50	
Salary of supervisor (in part)	331 57	
Salary of general foreman	1,795 04	
Salary of medical inspector (in part),	94 99	
Salary of veterinarian (in part)	190 00	
Stationery	35 25	
Printing	69 84	
Telephone	47 08	
Advertising	38 10	
Incidentals	130 09	
Proportionate share of supervisors automobile	476 78	
Automobile repairs and maintenance	1,796 91	
		<hr/>
General expenses other than general administration		1,814 56
Wages of stablemen, watchmen and yardmen	\$396 96	
Veterinary services and medicine	8 35	
Hay, straw and grain	483 07	
Horseshoeing	123 57	
Yard and stable building repairs	7 19	
Yard and stable rent and taxes	115 40	
Yard and stable furnishings	50 00	
Yard and stable light and fuel	12 05	
* Automobile repairs and maintenance	617 97	
		<hr/>
Operating expenses		135,152 42
Chief inspector	\$1,261 80	
Inspectors, water distribution	6,889 48	
Inspectors, oil distribution	261 67	
Labor, water distribution	251 00	
Labor, oil distribution	24 00	
Military roll	1,008 45	
Sanitary service	1,979 87	
Calcium chloride	714 00	
Freight and demurrage	501 47	
Road oil	63,793 52	
Rent, car sidings	25 00	
Standpipe, repair and maintenance, water carts	2,223 78	
Lime	338 17	
Tools	233 68	
	6 30	
		<hr/>
Carried forward	\$79,512 19	\$142,210 13

* See pages 516 and 517 for details of automobile costs.

<i>Brought forward</i>	\$79,512 19	\$142,210 13
Hose	171 50	
Bicycles	29 61	
Establishing hydrants (for electric car)	5,877 80	
Removing oil equipment from truck,	69 00	
Hired teams and automobiles, water distribution	41,127 90	
Hired teams and automobiles, oil distribution	729 74	
Electric car sprinkler	3,500 00	
* Automobile repair and maintenance	4,134 68	
Total		<u>\$142,210 13</u>

* See pages 516 and 517 for details of automobile cost.

DISTRIBUTION OF EXPENDITURES.

Removing snow	\$37,574 95	
Snow work on crossings and gutters,	14,082 25	
		\$51,657 20
Flushing streets		33,571 18
Street patrolling by teams	\$24,825 38	
Cleaning of subway passage	1,273 54	
Street patrolling by push carts	111,867 57	
Collection of refuse boxes	5,407 43	
		143,373 92
Cleaning of paved streets	\$241,439 87	
Cleaning of macadam streets	55,843 23	
Cleaning of public alleys	1,355 83	
		298,638 93
Sanding of slippery streets		3,993 60
Purchase of new horses		3,500 00
Work performed by Sanitary Service		68,230 14
Work performed by Paving Service		463 47
		\$603,428 44
Total expenditures, Street Cleaning Branch,		
Total expenditures for oiling of public streets and ways	\$71,666 67	
Total expenditures for watering of public streets and ways,	65,483 72	
Work done for Sanitary Service (not paid for)	5,059 74	
		142,210 13
Grand total		<u>\$745,638 57</u>

Summary.

ITEMS.	STREET CLEANING BRANCH.			STREET OILING AND WATERING BRANCH.		
	1916-17.	1917-18.	1918-19.	1916-17.	1917-18.	1918-19.
Labor.....	\$403,167 02	\$421,612 67	\$450,061 95	\$12,742 01	\$14,274 09	\$16,684 62
Teaming.....	49,274 19	48,622 72	26,371 88	39,126 21	29,330 67	45,357 64
Supplies and repairs.....	98,268 95	127,733 78	126,994 61	60,582 46	66,883 38	80,167 87
Totals.....	\$550,710 16	\$597,969 17	\$603,428 44	\$121,450 68	\$110,488 14	\$142,210 13

Cost of Snow Work and Volume Removed.

DISTRICTS.	Snow Work on Cross- ings and Gutters. Total Cost.	Snow Removal. Total Cost.	Total Cost. *	Single Loads Snow Removed. †	Cubic Yards Removed. †	Cost per Cubic Yards Removed. *
South Boston.....	\$2,141 37	\$2,322 42	\$4,463 79	936	2,433.6	\$0 9543
East Boston.....		52 59	52 59	24	62.4	0 8427
Charlestown.....	1,114 63	886 51	2,001 14	373	969.8	0 9141
Dorchester.....	360 37	141 81	502 18	64	166.4	0 8522
Roxbury.....	1,812 59		1,812 59			
Uptown.....	744 31	1,201 71	1,946 02	330	858.0	1 40
Downtown.....	1,063 01	10,128 76	11,191 77	3,120	8,112.0	1 2486
Back Bay.....	276 47	829 78	1,106 25	442	1,149.2	0 722
North and West Ends.....	1,524 81	12,588 99	14,113 80	3,773	9,809.8	1 2833
Patrol System.....	5,044 69	9,422 38	14,467 07	6,645	17,277.0	0 5453
Totals.....	\$14,082 25	\$37,574 95	\$51,657 20	15,707	40,838.2	
Average.....						\$0 9209

* Includes Sundays, paid time and one half; holidays, double time.

† Street Cleaning loads, 2.6 cubic yards each.

Summary.

ITEMS.	Cost of Inspection, Labor and Teaming.	Cost of all Other Charges.	Total Cost.	AMOUNT OF SNOW REMOVED.		Cost per Load Removed.	Cost per Cubic Yard Removed.
				Loads.	Cubic Yards.		
Snow removal.....	\$24,954 95	\$12,620 00	\$37,574 95	15,707	40,838.2	\$2 392	\$0 9209
Snow crossings and gutters.....	12,579 21	1,503 04	14,082 25				
Totals.....	\$37,534 16	\$14,123 04	\$51,657 20				

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Miles and Areas of Streets Cared for, 1918-19.

DISTRICT.	LOCATION.	MILES OF STREETS CARED FOR.		SQUARE YARDS CARED FOR.		Total Square Yards.
		Paved.	Macadam.	Broadway Paved.	Macadam 9-foot Gutters.	
No. 1.....	South Boston.....	23.74	30.08	489,974	158,856	648,830
No. 2.....	East Boston.....	6.34	23.28	142,984	122,969	265,953
No. 3.....	Charlestown.....	13.06	10.88	302,056	57,486	359,542
No. 6.....	Dorchester.....	9.46	84.50	197,172	446,172	643,884
No. 7.....	Roxbury.....	20.09	166.55	465,278	879,436	1,344,714
No. 8.....	South End (uptown).....	15.79	11.96	343,899	63,171	407,070
No. 8.....	South End (downtown).....	25.40	.92	502,601	4,903	507,504
No. 9.....	Back Bay.....	15.74	20.37	285,067	107,575	392,642
No. 10.....	North and West Ends.....	19.79	.86	362,362	4,562	366,924
Totals.....		149.41	349.40	3,091,393	1,845,130	4,937,063

Flushing.

SUPERVISION.	Cost of Labor and Teams.	Cost of Repairs and Tools.	Cost of All Charges.	Total Cost.	Square Yards Flushed Once.	Cost per Thousand Square Yards Flushed Once.
\$1,202 36	\$19,250 65	\$2,355 72	\$10,762 45	\$33,571 18	71,343,032	\$0.47055

Cost of Maintaining Horses on a Basis of 365 Days per Year.

DISTRICTS.	SOUTH BOSTON.		EAST BOSTON.		CHARLESTOWN.		DORCHESTER.		ROXBURY.		SOUTH STABLE.		WEST STABLE.		TOTAL.
AVERAGE NUMBER OF HORSES KEPT.	26.41		12.96		12.00		12.44		16.16		66.21		31.35		171.8
ITEMS.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.	Cost per Horse per Day.	Total per Year.
Labor	\$4,928 74	\$0 6614	\$3,510 68	\$0 742	\$2,911 36	\$0 66	\$3,920 96	\$0 8632	\$3,514 00	\$0 5955	\$12,077 80	\$0 4997	\$5,742 19	\$0 4974	\$36,805 73
Hay and grain	6,067 64	8143	3,893 79	806	2,893 00	8865	3,486 24	7675	4,875 38	8263	20,119 28	8325	10,072 36	8725	52,397 69
Fuel	75 95	0101	.....	.....	160 00	0365	247 04	0543	65 92	0111	.....	.....	.....	.....	548 91
Light	59 81	008	51 53	0108	52 08	0119	40 50	0089	149 60	0253	.....	.....	.....	.....	353 52
Rent and taxes	900 00	1207	2,240 75	4736	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,140 75
Yard and stable repairs	23 65	0031	.....	.....	358 44	0818	59 62	0131	270 88	0459	401 10	0166	58 95	0051	1,172 64
Yard and stable furnishings	140 71	0197	75 36	016	143 29	0327	63 85	014	440 75	0747	470 27	0194	453 27	0392	1,793 50
Veterinary service and medicine	143 18	0192	70 50	0168	72 00	0164	98 42	0216	129 14	0218	622 38	0257	268 50	0232	1,413 12
Horsehoeing, etc.	985 47	1322	741 28	1566	723 54	1651	663 87	146	* 724 71	1228	2,813 75	116	* 1,450 30	1259	8,102 92
Totals	\$13,331 15	\$1 789	\$10,592 89	\$2 239	\$8,303 71	\$1 865	\$8,580 50	\$1 899	\$10,170 38	\$1 722	\$36,504 58	\$1 51	\$18,045 57	\$1 563	\$105,528 78

* Work done by Sanitary Service not paid for

OILING OF MACADAM STREETS, 1918.
Showing Cost of Labor, Teaming, Oil, etc., Including Supervision.

DISTRICTS.	Total Area Oiled (Square Yards).	Equivalent Mileage, 30-foot Roadway.	Area Covered Once (Square Yards).	DATES OF OILING.		Average Number of Times Dis- trict Treated.	Total Cost.	Cost per Square Yard.		Gallons Used.	Gallons per Square Yard of Oiled Area.
				First.	Last.			Covered Once.	Entire Season.		
South Boston.....	304,681	17.311	448,880	May 17	Nov. 25	1.473	\$8,635.02	\$0.0192	\$0.283	52,984	.0173
East Boston.....	71,204	4.045	71,204	May 25	May 25	1.000	1,852.54	.026	.026	9,851	.1383
Charlestown.....	55,238	3.138	68,687	May 23	July 9	1.243	1,770.69	.0257	.032	10,238	.1853
Brighton.....	432,317	24.562	509,201	June 30	Sept. 23	1.177	7,114.46	.0139	.0164	45,510	.1052
West Roxbury.....	603,801	34.306	720,622	May 11	Oct. 17	1.183	11,368.15	.0157	.0188	71,509	.1184
Dorchester.....	650,884	26.982	787,467	May 24	Oct. 11	1.209	13,128.61	.0166	.0201	87,732	.1347
Roxbury.....	689,838	39.195	968,864	April 27	Oct. 17	1.404	12,932.18	.0133	.0187	88,378	.1281
South End, Back Bay and part of Roxbury.....	410,588	23.328	666,760	April 26	Nov. 8	1.648	10,014.48	.015	.0243	66,235	.161
Hyde Park.....	244,601	13.329	268,439	May 12	Sept. 3	1.097	4,850.54	.0143	.0198	29,813	.1218
Totals.....	3,463,153	196.196	4,510,124				\$71,666.67			462,250	
Averages.....								\$0.0154	\$0.0206		.1334

Owing to restrictions placed on the use of road oil by the United States Government, the City of Boston was unable to procure enough oil for its streets. While certain streets were oiled, others were not touched in part and many did not receive any treatment.

NOTE.—Average cost per gallon, 1918, \$0.14.
 Average cost per gallon, 1917, \$0.0772.
 Average cost per gallon, 1916, \$0.0472.
 Average cost per gallon, 1915, \$0.041.
 Cost of one square yard for season, \$0.0206.

AREA WATERED, 1918.
Showing Area Watered, Total Cost, and Cost per Square Yard.

Districts.	Total Square Yards Watered.	Equivalent Mileage, 30-foot Roadway	DATE OF WATERING.		Auto- days Worked.	Total Cost.	Cost per Square Yard.	Cart- days Worked.
			First	Last.				
South Boston.....	488,643	27.7632	April 16	Oct. 27	46	\$6,921 06	\$0 01416	565‡
East Boston.....	135,836	7.7178	April 26	Oct. 29	.....	1,714 31	01262	260
Charlestown.....	240,732	13.6779	April 11	Oct. 24	.....	2,919 89	01212	229
Brighton.....	146,669	8.3334	April 3	Oct. 29	.....	4,874 76	03323	418
West Roxbury.....	159,571	9.0665	April 2	Oct. 24	.....	5,205 66	03262	391‡
Dorchester.....	234,310	13.313	April 2	Oct. 29	.....	7,489 74	03106	739‡
Roxbury.....	236,747	13.4515	April 2	Oct. 27	1	8,428 35	0356‡	536‡
South End and part of Roxbury.....	626,920	35.6904	April 2	Nov. 8	2‡	11,297 22	01802	616‡
City proper.....	509,882	28.8569	Mar. 27	Nov. 15	373‡	14,050 03	02755	255‡
Hyde Park.....	77,231	4.3313	April 3	Oct. 24	.....	2,582 70	03344	225‡
Total.....	2,856,541	162.1319	.....	.....	*422‡	†865,483 72	.....	†4,249‡
Averages.....	.....	.....	.....	.....	.....	.....	\$0 0229	.....

* Includes 4‡ auto-days' work done by city autos.

† \$3,600 expended for electric car sprinkler under contract from June 1 to October 31, inclusive.

‡ Includes 82‡ cart-days' work done by city teams.

Oil Bought During 1918.

DEALER.	Gallons.	Amount.
Alden Speare's Company.....	9,737	\$1,338 84
American Oil Company.....	23,075	3,162 03
L. M. Crane Company.....	18,024	2,478 30
Galvin Oil Company.....	81,778	11,244 49
Gig Fertilizer Company.....	7,891	1,085 01
Indian Refining Company.....	105,512	14,654 57
Jenney Manufacturing Company.....	71,733	9,863 29
Lemmer Company.....	7,681	1,056 14
National Manufacturing Company.....	7,350	1,120 88
Standard Oil Company.....	103,000	14,440 00
United States Oil Company.....	20,058	2,757 97
Robeson Process Company.....	1,111.43	194 50
Burmendez Company.....	5,300	397 50
Totals.....	462,250.43	\$63,793 52

ASPHALTIC ROAD OIL.

5,300 gallons	\$0 07½ per gallon.
276,490 gallons	13½ per gallon.
179,349 gallons	14 per gallon.
1,111.43 gallons	17½ per gallon.

Details of Automobile Costs.

Supervisor.

Tires, new.....	\$305 30
Tubes, new.....	60 44
Tires, repaired.....	18 00
Tubes, repaired.....	17 40
Body and engine repairs.....	990 22
Oils, greases, etc.....	333 12
Storage.....	175 00
Registration.....	15 00
Supplies.....	43 87
Wages of chauffeur.....	546 00
Total.....	\$2,509 35

Foremen.

	East Boston.	Dorchester.	Roxbury.	Patrol System.
Tires, new.....	\$29 14	\$80 14	\$131 16	\$160 40
Tubes, new.....	9 64		5 28	35 34
Tires, repaired.....				5 00
Tubes, repaired.....	1 20	4 15	33 25	5 75
Body and engine repairs.....	43 31	103 69	218 51	128 12
Oils, greases, etc.....	*57 28	162 16	235 87	215 64
Storage.....				1 90
Registration.....	10 00	10 00	10 00	10 00
Supplies.....	44 11	12 79	19 06	17 33
Towing.....		3 00		3 00
Totals.....	\$194 68	\$275 93	\$653 13	\$582 48

* The cost of oils, etc., reduced by an allowance from Standard Oil Company.

Auto Truck No. 4102, Patrol System.

Tires, new.....	\$312 56
Body and engine repairs.....	530 35
Oils, greases, etc.....	1,222 55
Storage.....	250 00
Supplies.....	34 67
Wages of chauffeur.....	430 00
Total.....	\$2,780 13

Details of Automobile Costs.—*Concluded.**General Foreman.*

Tires, new	\$293 34
Tubes, new	24 46
Tubes, repaired	38 60
Body and engine repairs	757 74
Oils, greases, etc	404 48
Storage	180 00
Registration	30 00
Supplies	32 45
Total	\$1,761 07

Chief Inspector.

Tires, new	\$72 11
Tubes, new	27 04
Tires, repaired	35 74
Tubes, repaired	3 65
Body and engine repairs	251 15
Oils, greases, etc	203 45
Storage	
Registration	10 00
Supplies	14 83
Total	\$617 97

Street Watering and Oiling Truck No. 4106.

Tires, new	\$594 20
Body and engine repairs	1,174 63
Oils, greases, etc	442 49
Storage	250 00
Registration	2 00
Supplies	39 46
Wages of chauffeur	1,092 00
Total	\$3,594 78

APPENDIX E.

REPORT OF THE DIVISION ENGINEER OF THE WATER DIVISION.

February 1, 1919.

To the Commissioner of Public Works:

I respectfully submit the following report of the operation, income, and expenditures of the Water Division for the past year:

Owing to conditions resulting from the world war, new building construction practically ceased throughout the city and the work of this division was confined to maintenance, extensions of the high service for sprinkler and fire pipe purposes, pipelaying in advance of new street construction, relaying for the general improvement of the system, particularly in the line of fire protection, pipe cleaning, etc.

During the year 2.76 miles of pipe were laid and 5.27 miles were relaid, making a total of 8.03 miles of new pipe installed.

Two thousand one hundred twenty-six linear feet of 16-inch pipe was laid in Commercial street, between Washington Street North and Clark street, affording a much needed reinforcement to the high service system north of State street.

Due to the relocation of Commonwealth avenue, 425 feet of 48-inch main was relaid at Charlesgate East.

Due to the widening of the New York, New Haven & Hartford Railroad cut in South Boston, and the construction of new bridges at Fifth street, Silver street, Broadway, Athens street, Third street, Bolton street and Second street, the old cast-iron pipes at these points were replaced by steel pipes with concrete protection. The pipes crossing the new bridges at Fourth street and Gold street were replaced with cast iron.

The fire and general service supply at the Boston Consumptives' Hospital and in the area northeast of the

hospital was greatly strengthened by a second feed laid from Sanford street through Cedar street, Manchester street and private land.

The private pipe system in the area in West Roxbury known as Boston Heights was rearranged and repaired in such a way that a fairly satisfactory domestic service was afforded to this area. The system is, at best, a make-shift and does not afford any degree of fire protection. The question of an adequate water supply for this area, together with the areas in the same portion of West Roxbury known as Grove Street Grove and West Roxbury Highlands, is a serious one which should be settled without delay. At present there is no fire protection in these areas and the domestic supply is entirely inadequate. It may fail at any time and is sure to fail in the winter time.

A 16-inch connection was made on Faneuil street at Brooks street with the new 20-inch main laid through Brighton to Watertown by the Metropolitan Water and Sewerage Board. This connection is of the greatest value to the Brighton high service as it affords the possibility of an efficient independent supply to the system which is now fed by a single 16-inch connection at Cleveland circle near Chestnut Hill Reservoir. Under normal conditions the gate on this connection is kept closed. A branch was left by the Metropolitan Water Board in its 20-inch main for a second 16-inch connection on Lake street at Commonwealth avenue. This connection has not yet been made.

Seventeen thousand feet of main pipe was cleaned in Hyde Park resulting in a marked improvement in the service.

A number of small pipes in private ways throughout the city which for many years past have been the source of revenue and which had worn out were relaid with cast-iron pipes after the necessary releases had been obtained from the owners.

The most outstanding feature of the past year from a waterworks point of view was the unprecedented cold of the winter of 1917-18. The cold was the most severe recorded by the United States Weather Bureau at Boston. The average mean temperature for December, 1917, January and February, 1918, was 24 degrees. The average mean temperature for the same three months for the past forty-eight years was 28.9 degrees. This unusual

cold, aided and abetted by the scarcity of snow, caused a wholesale freezing of main pipes, services, meters and hydrants throughout the whole northern part of the country.

In Boston the situation was acute and serious danger to the community, from the points of view of fire protection and public health, was only averted by prompt action.

At the time of maximum effort the following thawing equipment was in service: 2 storage batteries operated by the department; 3 storage batteries operated by the Edison Electric Illuminating Company; 8 overhead electrical outfits operated by contractor; 10 small steam boilers and 2 large steam boilers; 2,633 service, 6,720 linear feet of main pipe (principally dead ends and pipes on bridges), 479 hydrants and 6,812 meters were frozen. In such an emergency as that of last winter electricity is an invaluable means of relief, but intelligence must be employed in its use if damage to the pipe system is to be avoided. Trouble will surely result if too much current is used.

Respectfully submitted,

F. A. McINNES,
Division Engineer.

WATER DIVISION, 1918-19.

FINANCIAL STATEMENT.

RECEIPTS.

Sales of water	\$2,998,922 73
Elevator, fire, motor, stand pipes and repairs.	13,021 59
Labor materials for miscellaneous work	11,389 06
Sales of old materials	9,060 16
Service pipes and repairs	8,535 28
Fees for summonses	4,688 20
Extension of main pipe	835 84
Shutting off and letting on water for nonpayment	776 00
Board of horses	623 49
Interest on bank deposits	577 02
Sale of junk	526 35
Sale of merchandise	434 39
Testing meters	30 85
Sale of gasoline	24 58
Sale of dead horses	7 00

Total receipts from all sources	\$3,049,452 54
Transferred to City Loan account to pay Hyde Park water debt	\$16,000 00
Transferred to credit of Collecting Department, Water Service	26,105 88
Transferred to appropriation for service mains and relaying mains	30,000 00
Transferred to City Loan account to be applied to general city debt	108,263 96
	<u>180,369 84</u>
	<u>\$2,869,082 70</u>

EXPENDITURES.

Current expenses and extensions	\$1,055,842 87
Interest on loans	71,268 00
Refunded water rates	962 99
Metropolitan water assessment	1,741,008 84
	<u>\$2,869,082 70</u>

SERVICE MAINS AND RELAYING MAINS.

Balance appropriation February 1, 1918.	\$25,087 31
Appropriated from income August 14, 1918	30,000 00
	<u>\$55,087 31</u>
Expenditures during the fiscal year 1918-19	51,599 48
	<u>\$3,487 83</u>

Details of expenditures under appropriation for current expenses and extensions for the fiscal year ending January 31, 1919.

EXTENSION.			
New mains		\$61,566	49
Replacement of old mains		102,822	20
New hydrants		5,412	73
Total extension			\$169,801 42
MAINTENANCE.			
Office and Engineering Branch:			
Salaries and wages	\$41,411	91	
Traveling expenses	876	29	
Printing, stationery and post- age	1,706	39	
Miscellaneous	1,417	18	
			\$45,411 77
Income Branch:			
Salaries and wages	\$90,882	10	
Traveling expenses	898	38	
Printing, stationery and post- age	4,018	18	
Miscellaneous	683	69	
			96,482 35
Distribution Branch:			
Salaries and wages	\$26,659	14	
Traveling expenses	257	41	
Printing, stationery and post- age	1,232	54	
Miscellaneous	2,449	62	
			30,598 71
Meter Branch:			
Salaries and wages	\$11,057	15	
Traveling expenses	106	06	
New meters and setting	6,762	00	
Meters, repairing, resetting, testing, etc.	27,594	39	
Printing, stationery and post- age	356	46	
Shops	13,928	43	
Investigations	1,182	03	
Holiday	3,002	55	
Laborers' vacations	1,716	54	
Guarding bridges	6,369	02	
Miscellaneous	718	65	
			72,793 28
Waste Prevention Branch:			
Salaries and wages	\$10,671	61	
Traveling expenses	399	49	
Printing, stationery and post- age	12	18	
Miscellaneous	79	44	
			11,162 72
Inspection of castings		2,247	39
Damage		14,274	16
Yards		53,011	21
Shops		24,059	93
Carried forward		\$350,041	52
			\$169,801 42

<i>Brought forward</i>	\$350,041 52	\$169,801 42
Stables:		
Labor	\$12,854 94	
Hay and grain	11,640 32	
Building repairs	2,400 31	
Wagon repairs	1,911 36	
Horseshoeing	1,838 75	
New horses	700 00	
Board of horses	685 06	
Veterinary services	463 55	
Harness repairs	382 62	
Light	169 88	
Furnishings	70 46	
Miscellaneous	148 42	
	<u>\$33,265 67</u>	
Less miscellaneous material from storeroom	11 36	
		33,254 31
Tools and repairs		14,594 00
Main pipe relocation		34,396 98
Main pipes repairs		70,571 21
Service pipes, new		25,568 18
Service pipes, changes (size and location)		10,514 38
Service pipes, repairs		117,831 50
Hydrant changes (size and location)		24,397 66
Hydrant repairs		42,313 11
Water posts, new		2,078 33
Water posts, changes (location)		13 25
Water posts, repairs		816 17
Fountain, changes		51 02
Fountain, on account of ice		8 75
Fountain, repairs		1,992 13
Holiday		31,675 47
Automobiles		19,374 37
Delivering water		540 60
Investigations		9,627 70
Shutting off and letting on water		21,006 08
Accommodation work		3,180 84
Work on account of Income Branch (by Dis- tribution Branch)		208 45
Work on account of Meter Branch (by Dis- tribution Branch)		1,072 04
Work on account of Office and Engineers (by Distribution Branch)		346 40
Work on account of Waste Prevention Branch (by Distribution Branch)		248 96
Work on account of new meters (by Distribu- tion Branch)		1,818 55
Work on account of meter repairs (by Dis- tribution Branch)		6,378 58
Launch "Watercrest," new, \$300; repairs and supplies, \$740.37		1,040 37
Motor cycle No. 106, repairs and supplies,		11 50
Pensions paid to Civil War veterans		6,705 33
Pensions paid to retired laborers		27,118 30
Pay allowed injured employees		1,649 42
Vacations allowed mechanics, laborers, etc.,		13,117 13
Pay allowed employees in war service		7,114 88
High service, East Boston		1,107 18
<i>Carried forward</i>	\$881,784 65	\$169,801 42

<i>Brought forward</i>	\$881,784 65	\$169,801 42
East Boston reservoir	58 02	
Medical inspection	166 66	
Taxes	172 30	
Harbor service	12,435 76	
	<hr/>	
Total maintenance		894,617 39
Merchandise sold	\$2,313 57	
Stock consigned to junk	3,596 55	
	<hr/>	
		5,910 12
Stock purchased		231,973 98
		<hr/>
		\$1,302,302 91
Less stock used and disposed of		246,460 04
		<hr/>
Total expenditures under appropriation for Current Expenses, etc.		<u>\$1,055,842 87</u>

Details of expenditures under appropriation for service mains and relaying mains for the fiscal year ending January 31, 1919. (From revenue.) Orders City Council, August 12, 1913, October 22, 1914, November 19, 1917, and August 14, 1918.

New mains	\$21,062 02
Replacement of old mains	5,386 24
Relocation of mains	21,598 90
Service pipes, new	552 32
	<hr/>
	<u>\$51,599 48</u>

Comparative Table of Receipts and Expenditures.

Receipts.

	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
Sales of water.....	\$2,906,569 76	\$2,947,210 88	\$2,923,719 09	\$2,859,707 92	\$3,037,974 66	\$2,872,867 89	\$2,998,922 73
Other receipts.....	75,874 49	84,389 48	69,922 86	84,977 77	71,374 55	79,223 75	50,529 81
Transfers by City Auditor.....	\$2,982,244 25	\$3,031,600 36	\$2,993,641 95	\$2,944,685 69	\$3,106,349 21	\$2,952,091 64	\$3,049,452 54
	\$2,982,244 25	\$3,031,600 36	\$2,993,641 95	\$2,944,685 69	\$3,106,349 21	* 4,826 39	
Balance, beginning of year.....	\$64,521 97	\$274,580 54	\$340,819 49	\$184,470 24	\$135,014 40	\$87,146 19	\$25,087 31
Balance, end of year.....	274,580 54	340,819 49	† 184,470 24	† 135,014 40	† 87,146 19	† 25,087 31	† 3,487 83
Transferred to Collecting Department.....				24,500 00	25,774 00	27,264 14	26,105 88
Transferred to city loan account.....	4,434 20	17,000 00	355,650 26	259,046 70	407,823 86	16,000 00	124,263 96
Transferred to appropriation for service mains and relaying mains.....		200,000 00	200,000 00			35,000 00	30,000 00

Expenditures.

	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
Current expenses.....	† \$835,072 00	\$899,338 91	\$894,170 14	\$904,135 19	\$917,823 64	\$1,045,543 65	\$1,055,842 87
Service and relaying mains.....		86,945 40	128,584 36	49,455 84	47,868 21	97,058 88	51,599 48
Metropolitan water assessment.....	1,792,123 83	1,842,127 65	1,676,038 11	1,865,006 20	1,669,432 79	1,752,004 76	1,741,008 84
Interest.....	137,875 37	118,673 48	94,615 02	91,259 22	87,866 99	80,494 28	71,268 00
Refunded water rates.....	2,680 28	1,275 97	933 31	738 38	628 33	611 20	962 99
	\$2,767,751 48	\$2,948,361 41	\$2,794,340 94	\$2,710,594 83	\$2,723,619 96	\$2,975,712 77	\$2,929,682 18

* Transfer from Reserve Fund.

† Balance of appropriation for service mains and relaying mains.

‡ Amount expended for current expenses and extensions; there being one appropriation only.

COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

Cost of construction to February 1, 1919	\$17,790,305 62
Cost of construction to February 1, 1918	17,568,904 72
Increase during the year	<u>\$221,400 90</u>
Outstanding loans February 1, 1918, at 3½ per cent	\$338,400 00
Outstanding loans February 1, 1918, at 4 per cent	1,169,350 00
	<u>\$1,507,750 00</u>
Outstanding loans February 1, 1919, at 3½ per cent	\$233,400 00
Outstanding loans February 1, 1919, at 4 per cent	1,074,350 00
	<u>1,307,750 00</u>
Decrease during the year	<u>\$200,000 00</u>
The Water Sinking Fund February 1, 1918, was	\$1,507,750 00
The Water Sinking Fund February 1, 1919, was	1,307,750 00
Decrease during the year	<u>\$200,000 00</u>
Net Water Debt February 1, 1918	\$368,000 00
Gross Water Debt February 1, 1919	\$1,659,750 00
Less Sinking Fund February 1, 1919	1,307,750 00
Net Water Debt February 1, 1919	<u>352,000 00</u>
Decrease during the year	<u>\$16,000 00</u>
Stock on hand February 1, 1919	\$430,417 93
Stock on hand February 1, 1918	398,772 76
Increase during the year	<u>\$31,645 17</u>
Cochituate Water Sinking Fund receipts, 1918-19:	
Interest on investments	\$44,554 35
Interest on bank deposits	8,086 43
	<u>\$52,640 78</u>
Cost of existing works on January 31, 1919:	
East Boston reservoir	\$66,103 09
East Boston high service	24,173 26
Pipe yards and buildings	94,832 16
Engineering expenses	57,873 58
Distribution system (additions during year, \$221,400.90),	17,079,323 53
Hyde Park waterworks	468,000 00
	<u>\$17,790,305 62</u>

Automobiles.

	New.	Registration Licenses, etc.	Tires and Tubes, New and Repaired	Gasoline, Oils, Greases, etc.	Storage.	Repairs, Supplies, etc.	Chauffeurs' Wages.	Totals.
83. Truck emergency work.....		\$2 00	\$637 12	\$457 21		\$504 49	\$4,382 00	\$5,982 82
90. Truck, general work.....		2 00	72 20	119 43		271 89	1,095 50	1,561 02
96. Truck, general work.....		2 00	237 32	400 74		336 81	1,095 50	2,072 34
98. Truck, shutoff gang.....		2 00	93 62	257 74		290 95	1,095 50	1,709 81
99. Truck, West Roxbury district.....		2 00	200 71	118 02	\$105 00	441 62		1,967 35
100. Roadster, engineer in charge.....		11 00	205 33	213 62	1 50	816 38	1,095 50	2,343 33
102. Truck, general work *.....			45 89	29 75		299 70		375 34
103. Runabout, foreman, Dorchester district.....			98 29	81 35		170 61		359 25
104. Truck, general work.....		4 00	149 35	75 61		361 12		590 08
105. Runabout, foreman, Brighton district.....		11 00	110 63	134 83	57 50	175 02		488 98
107. Touring car, engineer, District No. 1.....		10 75	200 37	205 07		343 28		759 47
108. Truck, shutoff gang.....		2 00	219 09	182 25		352 06		755 40
109. Runabout, foreman, West Roxbury district.....		11 00	72 92	151 97	114 00	145 29		495 18
110. Runabout, general foreman.....		11 00	162 56	53 82		409 47		637 25
111. Truck, Dorchester district.....		2 00	206 15	290 59		257 69	1,095 50	1,771 93
112. Truck, meter branch.....		2 00	162 57	162 77		425 00		752 34
113. Truck, meter branch.....		6 00	124 60	157 70		432 09		720 39
114. Truck, meter branch.....		2 00	116 95	178 98		299 40		697 33
115. Truck, meter branch.....		6 00	198 33	262 86		306 39		773 58
116. Touring car, engineer, District No. 2.....		11 00	210 08	253 84		225 57		700 49
117. Runabout, foreman, city proper, South Boston and Roxbury districts.....		11 50	167 28	255 23		299 61		733 62
118. Truck, Hyde Park district.....		3 00	75 50	72 97	110 00	10 59		272 12
119. Runabout, engineer, meter branch.....		11 00	87 21	128 63		112 01		338 85
120. Truck, meter branch.....		4 00	217 18	269 54		145 07		635 70
121. Truck, shutoff gang.....		4 00	437 23	426 61		242 69		1,110 63
122. Truck, plumbing work.....	\$353 95	3 00	110 98	167 24		124 13		1,159 28
125. Truck, out, division engineer.....	798 00	22 00	31 70	75 40	131 67	38 00		1,094 77
126. Truck, general work.....	913 24	6 00		36 36		137 50		1,093 10
122a. Touring car.....	500 00							500 00
Garage labor.....						1,825 23		1,825 23
Totals.....	\$2,565 19	\$175 25	\$4,649 30	\$5,100 10	\$520 07	\$9,807 66	\$9,859 50	\$32,677 07

* \$125 allowed for chassis of this car on price of car No. 122, April 15, 1918.

† \$600 allowed for this car on price of car No. 125.

INCOME BRANCH.

The following tables show in detail the operations of this branch during the past year:

Table I.—Assessments, Abatements and Collections, 1905-18, Inclusive.

ACCOUNT OF YEAR.	Amount Assessed.	Amount Abated.	Amount Collected.	Balance Outstanding.
1905.....	\$2,446,978 39	\$36,107 08	\$2,410,871 31	.....
1906.....	2,524,205 25	37,599 28	2,486,605 97	.....
1907.....	2,619,031 00	34,959 33	2,584,071 67	.....
1908.....	2,645,962 55	36,939 32	2,609,023 23	.....
1909.....	2,694,408 57	49,407 44	2,645,001 13	.....
1910.....	2,845,900 66	† 117,818 49	2,728,182 17	.....
1911.....	2,863,497 95	† 61,979 73	2,798,055 28	\$3,462 94
1912.....	3,001,771 87	41,251 26	2,943,402 48	17,118 13
1913.....	3,004,331 52	37,213 39	2,954,173 62	12,944 51
1914.....	3,034,885 83	23,521 74	2,970,232 82	41,131 27
1915.....	2,960,797 45	15,006 24	2,902,762 96	43,028 25
1916.....	3,130,539 28	15,184 80	3,052,292 06	63,062 42
1917.....	3,120,764 82	15,811 89	3,011,416 30	93,536 63
1918.....	3,301,467 70	83,731 21	2,699,676 33	518,060 16
1919.....	* 413,712 40	132 41	50,979 71	362,600 35

* Represents annual accounts only. † Includes city department accounts abated.

Table II.—Elevators.

Elevators, December 31, 1917.....	512
New elevators accepted during 1918.....	1
Elevators abandoned during 1918.....	1
Elevators in use and accounted for December 31, 1918.....	512

Table III.—Fire Pipes.

Under supervision December 31, 1917.....	1,522
Fire pipes accepted during the year.....	95
Under supervision December 31, 1918.....	1,617

Table IV.—Motors.

Under supervision December 31, 1917.....	96
Under supervision December 31, 1918.....	96
Motors on meter.....	22

Table V.—Complaints and Water Turned Off and On.

Complaints, no force, stoppages, etc.		689
Water turned off and on:		
Repairs of services.	7,908	
Vacancy.	2,440	
First time.	216	
Nonpayment.	1,785	
Waste.	11	12,360
Total.		13,029

METER BRANCH.

The following tables give in detail the operations of this branch during the past year:

Table No. I.—Statement of Work During the Year.

MAKE.	New Sets.	Discontinued.	CHANGED.		Tested.	Repaired in Shop.	Resets.	Repaired in Service.
			In.	Out.				
Hersey disc.	186	122	4,562	4,103	7,330	7,201	3,272	361
Worthington disc.	23	14	.....	1,247	1,508	1,290	848	72
Crown.	20	23	195	259	541	323	61	23
American.		8	81	190	388	121	52	5
Hersey rotary.	12	9	79	131	271	107	20	17
Nash.	5	7	56	105	219	65	17	12
Lambert.	2	2	23	64	130	32	10	9
Trident.	3	1	10	26	63	15	3	1
Keystone.	1	.....	10	21	42	10	3	3
Empire.	1	1	1	14	29	2	.....	.....
Worthington.			878	6	12	1	.....	.....
Gem.				1	2	1	.....	.....
Hersey detector.	6	.....	2	.....	7	.....	.....	28
Metropolitan.				4	8	.....	.....	.....
Standard. ....					.....	.....	.....	.....
King.	46	4	429	155	1,244	108	453	34
Totals.	305	191	6,326	6,326	11,794	9,275	4,739	565

Table No. II.

Meters in Stock February 1, 1919.

MAKE.	DIAMETER IN INCHES.								Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	2	3	4	6	
Hersey disc.....	1,017	41	19	11	2	1	2	...	1,093
Worthington disc.....	747	4	...	...	...	...	...	...	751
Crown.....	21	1	41	12	14	8	2	2	101
American.....	113	2	...	...	...	...	...	...	115
Hersey rotary.....	14	2	2	12	3	...	...	4	37
Nash.....	144	...	15	7	2	...	...	...	168
Lambert.....	69	...	2	...	...	...	1	...	72
Trident.....	6	...	1	...	...	2	...	...	9
Keystone.....	...	1	...	...	...	...	...	1	2
Empire.....	...	...	1	1	...	...	...	...	2
Standard.....	...	...	...	1	...	...	...	...	1
King.....	...	...	27	14	4	...	...	...	45
Totals.....	2,131	51	108	58	25	11	5	7	2,396

Table No. III.
Meters in Service February 1, 1919.

MAKE.	DIAMETER IN INCHES.												Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	3	4	6	8	10	12	
Hersey disc.....	42,510	2,838	1,420	1	705	255	125	32	1				47,887
Hersey rotary.....	276	352	265		161	148	54	27	9				1,292
Hersey detector.....							3	16	23	12	4	2	60
Crown.....	985	498	351		198	171	81	54	13				2,351
Nash.....	320	239	124		36	35	3						757
Lambert.....	254	115	72		13	18		3					475
Trident.....	186	4	3		4	5	8		1				211
Worthington.....	1	13	35		7	11	2	1					70
Worthington disc.....	5,984	34	6			18							6,042
Keystone.....	178	83	22		2	3	9		1				298
Metropolitan.....		14	1										15
American.....	910	488											1,398
Worthington turbine.....								1					1
Empire.....	137	3	4		6								150
Gem.....						3	4	7	9				23
Standard.....	11												11
B. W. W.....		1											1
Thomson.....	6	2											8
Union.....	2	1											3
Gamon.....	1												1
Hersey compound.....									2				2
King.....	1,300	26	224		12	22							1,584
Totals.....	53,061	4,711	2,527	1	1,144	689	289	141	59	12	4	2	62,640

Table No. IV.
Meters Purchased.

MAKE.	DIAMETER IN INCHES.											Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	2	3	4	6	8	10	12	
Hersey disc.....							2					2
Hersey detector.....							3	1	1	1	1	7
King.....	801	26	51	26	26							930
Trident.....						10						10
Totals.....	801	26	51	26	26	10	5	1	1	1	1	949

Table No. V.
Meters Condemned.

MAKE.	DIAMETER IN INCHES.								Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	2	3	4	6	
Crown.....	23	15	6	2	8	4	....	....	58
Hersey rotary.....	....	1	3	....	1	....	2	....	7
Nash.....	....	1	1	1	2	....	....	....	5
Lambert.....	....	1	....	1	....	....	....	....	2
Worthington.....	....	2	5	2	1	....	1	....	11
Hersey torrent.....	....	....	....	....	....	....	....	1	1
Metropolitan.....	....	2	1	....	....	....	....	....	3
Totals.....	23	22	16	6	12	4	3	1	87

Table No. VI.
Meters Repaired in Service.

MAKE.	CAUSES.							Totals.
	Glass Broken.	Clock Broken.	Cover Broken.	Spindle Leak.	Coupling Leak.	Relocated.	Miscellaneous.	
Hersey disc.....	11	66	4	181	87	4	8	361
Worthington disc.....	4	....	58	9	....	1	72
Crown.....	9	12	1	1	23
American.....	2	2	....	1	5
Hersey rotary.....	8	....	8	1	....	....	17
Nash.....	9	2	....	2	13
Lambert.....	3	....	5	1	....	....	9
Trident.....	1	....	....	....	....	....	1
Keystone.....	2	....	1	....	....	....	3
Hersey detector.....	26	....	2	....	....	....	28
King.....	27	7	....	....	34
Totals.....	11	110	4	302	121	5	13	566

Table No. VII.
Meter Changes.

MAKE.	METERS IN.												METERS OUT.						Totals.
	DIAMETER IN INCHES.												DIAMETER IN INCHES.						
	1	1 1/4	2	3	4	6	12	Totals.	1	1 1/4	2	3	4	6					
Hersey disc.....	4,078	274	117	50	19	21	3	4,582	3,604	259	132	54	29	23	1	1	4,103		
Hersey rotary.....	3	19	14	22	15	5	1	79	29	41	25	15	17	2	2		131		
Crown.....	62	49	28	23	20	7	2	195	102	58	31	27	22	12	3	4	259		
Nash.....	5	29	11	7	4			56	56	21	18	8	2				105		
Lambert.....	5	12	6					23	40	12	9	1	2				64		
Trident.....	3					7		10	20	4				2			26		
Worthington.....											3	1	2				6		
Worthington disc.....	868	8			2			878	1,241	4		1		1			1,247		
Keystone.....		6	2	1		1		10	13	5	2			1			21		
Metropolitan.....										2	2						4		
American.....	31	50						81	143	47							190		
Empire.....	1							1	13	1							14		
King.....	308	14	77	15	15			429	121		33	1					155		
Gem.....															1		1		
Detector.....						1	1	2											
Totals.....	5,364	461	255	118	75	41	7	6,326	5,382	454	255	108	74	41	6	6	6,326		

Table No. VIII.
Causes for Meters Changed.

MAKE.	Test.	Not Registering.	No Force.	Stoppage.	Enlarged.	Spindle Leak.	Coupling Leak.	Frost or Leak at Flange.	Set Backward.	Relocated.	Clock Defaced or Broken.	Totals.
Hersey disc.....	183	1,596	64	19	11	198	55	1,601	99	3	274	4,103
Hersey rotary.....	12	84	1			1	1	12	2	1	17	131
Crown.....	20	81	1	1	3	23	1	102	2		25	259
Nash.....	8	55	1			3	2	31			5	105
Lambert.....	1	28	1	1		6		19		1	7	64
Trident.....	1	17				1		5		1	1	26
Worthington.....	3	2	1									6
Worthington disc.....	34	552	13	8		103	17	444	20		56	1,247
Keystone.....	4	5		1				5			6	21
Metropolitan.....	1	2									1	4
American.....	7	118		2		5		38	1		19	190
Empire.....	1	5				3	2	3				14
King.....	8	49	2			28	2	65	1			155
Gem.....		1										1
Totals.....	283	2,595	84	32	14	371	80	2,325	125	6	411	6,326

Table No. IX.
Meters Applied.

MAKE.	DIAMETER IN INCHES.										Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	2	3	4	6	8	10	
Hersey disc.....	117	17	20	10	14	4	3	1			186
Hersey rotary.....			3	3	3	2	1				12
Hersey detector.....							4		1	1	6
Crown.....	2		1	7	6	2	2				20
Nash.....		1	2	1	1						5
Lambert.....			1		1						2
Trident.....			3								3
Worthington disc.....	23										23
Keystone.....					1						1
Empire.....				1							1
King.....	13	1	22	3	7						46
Totals.....	155	19	52	25	33	8	10	1	1	1	305

WASTE PREVENTION BRANCH.

The following tables give in detail the operations of this branch during the past year:

Table I.

Waste Prevention.

Premises examined.....	13,642
Special investigation.....	670
Waste reports.....	2,655
Re-examinations.....	2,550
Found repaired.....	1,499
Not repaired.....	398

Table II.

Defective Fixtures and Waste.

Tank fixtures leaking.....	884
Faucets.....	731
Pipes inside.....	200
Pipes outside.....	209
Metered premises with leaks.....	609
Hydrants leaking.....	17
Willful waste.....	48

DISTRIBUTION BRANCH.

The following tables show in detail the operations of this branch during the last year:

Table No. 1.

Showing Length of Main Lines of Water Pipes and Connections Owned and Operated by the Public Works Department, Water Division (Water Service), and Number of Valves in Same January 31, 1919.

DIAMETER OF PIPES IN INCHES.																		Totals.
48	42	40	36	30	28	24	20	16	14	12	10	8	6	4	3	2		
Length owned and operated January 31, 1918 (feet)	10,618	15,617	16,105	37,147	93,076	244	79,067	86,923	258,178	5,021	1,435,616	373,996	810,983	1,254,819	106,667	7,022	5,898	4,590,925
Gate valves in same	9	4	8	18	59	2	67	76	567	21	3,431	1,239	2,668	3,947	613	16	12	12,755
Air valves in same	13	3	7	27	102	2	47	42	47	4	32	2	3	113	58	6	1	327
Blow-offs in same	1	4	3	8	35	1	20	44	62	1	153	40	102	113	58	6	1	660
Length laid and relaid during year 1918-19	443	66	56	89	204	1	241	3,219	20	9,005	14,923	15,599	3,199	3,199	130	1	1	47,194
Gate valves in same	1	1	1	1	1	1	1	14	4	86	56	68	23	23	3	1	1	250
Air valves in same	1	1	1	1	1	1	1	2	3	1	1	1	5	4	1	1	1	9
Blow-offs in same	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
Length abandoned during year 1918-19	454	1	80	104	244	1	93	108	1	3,308	577	1,939	22,554	3,429	12	1	1	32,950
Gate valves in same	1	1	1	1	2	1	1	1	2	7	3	4	71	71	12	5	5	101
Air valves in same	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	7
Blow-offs in same	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7
Length owned and operated January 31, 1919 (feet)	10,607	15,633	16,081	37,132	93,290	244	79,067	87,071	261,229	5,041	1,441,313	388,342	824,643	1,235,464	103,368	7,022	5,898	4,611,169
Gate valves in same	9	4	8	18	59	2	67	75	580	19	3,510	1,292	2,732	3,869	604	16	12	12,904
Air valves in same	13	3	7	27	102	1	48	42	51	4	32	1	4	115	57	6	1	331
Blow-offs in same	1	4	3	8	35	1	21	46	64	1	153	40	106	115	57	6	1	660

* 873.32 miles in system.

Table No. II.
Statement of Hydrant, Blow-off and Reservoir Pipes.

	DIAMETER IN INCHES.								Totals.
	16	12	10	9	8	6	4	3	
Total length connected with system January 31, 1918.....	27	5,618	188	1,922	5,812	60,676	6,489	49	80,781
Length laid and relaid during year.....		32			106	1,741	136	4	2,019
Length abandoned during year.....		58			35	545	38		676
Total length connected with system January 31, 1919.....	27	5,592	188	1,922	5,883	61,872	6,587	53	82,124

Table No. III.

Total Number of Hydrants in System January 31, 1919.

	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Ludlow Post.	Chapman Post.	Coffin Post.	Matthews Post.	Boston.	Totals.
City proper (public).....	516	42	652	234	.....	.....	.....	.....	71	1,515
" (private).....	4	.....	9	6	.....	.....	.....	.....	39	58
Roxbury (public).....	391	64	569	430	.....	.....	.....	.....	18	1,472
" (private).....	2	1	3	2	.....	.....	.....	.....	10	18
West Roxbury (public).....	67	195	543	764	.....	.....	.....	.....	18	1,587
" (private).....	.....	.....	.....	16	.....	.....	.....	.....	1	17
Brighton (public).....	52	63	299	453	.....	.....	.....	.....	14	881
" (private).....	.....	.....	.....	8	.....	.....	.....	.....	2	10
Dorchester (public).....	247	177	726	1,103	.....	.....	.....	.....	22	2,275
" (private).....	.....	1	8	1	.....	.....	.....	.....	4	14
South Boston (public).....	126	27	287	190	.....	.....	.....	.....	18	648
" (private).....	3	.....	.....	15	.....	.....	.....	.....	27	45
East Boston (public).....	43	18	247	191	.....	.....	.....	.....	6	505
" (private).....	8	.....	.....	9	.....	.....	.....	.....	25	42
Charlestown (public).....	107	41	162	36	.....	.....	.....	.....	2	348
" (private).....	13	1	.....	37	.....	.....	.....	.....	5	56
Hyde Park (public).....	.....	2	28	251	9	147	1	.....	.....	438
" (private).....	.....	.....	.....	.....	13	55	.....	4	.....	72
Deer Island (private).....	.....	.....	1	20	.....	.....	.....	.....	.....	21
Long Island (private).....	.....	.....	.....	6	.....	.....	.....	.....	.....	6
Thompson's Island (private).....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Gallop's Island (private).....	.....	.....	.....	3	.....	.....	.....	.....	1	4
Rainsford Island (private).....	.....	.....	.....	3	.....	.....	.....	.....	1	4
Quincy.....	.....	.....	.....	9	.....	.....	.....	.....	.....	9
Total number (public).....	1,549	629	3,513	3,652	9	147	1	.....	169	9,669
Total number (private and suburban).....	30	3	21	137	13	55	.....	4	115	378

Table No. IV.

*Total Number and Aggregate Length of Service Pipes of Various Sizes
Connected with System January 31, 1919.*

SIZE.	Total Number.	Aggregate Length in Linear Feet.
$\frac{1}{8}$ -inch.....	6,943	159,080
$\frac{1}{4}$ -inch.....	84,999	2,373,601
$\frac{3}{8}$ -inch.....	3,402	117,397
1-inch.....	5,420	195,191
1 $\frac{1}{4}$ -inch.....	496	15,073
1 $\frac{1}{2}$ -inch.....	1,531	47,109
2-inch.....	2,124	66,571
2 $\frac{1}{2}$ -inch.....	12	267
3-inch.....	927	26,960
4-inch.....	2,184	68,354
6-inch.....	178	22,562
8-inch.....	52	3,843
10-inch.....	10	1,648
12-inch.....	18	3,627
16-inch.....	2	95
Totals.....	108,298	3,101,378

Table No. V.

Fountains in Service January 31, 1919.

	Style B.	Style D.	Style G.	Style H.	Style I.	Style J.	Style K.	Style L.	Style M.	Totals.
City proper.....	...	...	...	7	18	12	...	6	12	55
Roxbury.....	2	...	...	4	1	5	3	1	2	18
West Roxbury.....	...	1	...	...	...	2	2	2	1	8
Brighton.....	...	...	...	1	...	...	2	3	...	6
Dorchester.....	1	...	1	1	...	2	1	1	4	11
South Boston.....	2	...	...	2	5	6	1	1	1	18
East Boston.....	3	...	...	5	...	3	...	1	...	12
Charlestown.....	...	...	...	...	11	6	...	3	2	22
Hyde Park.....	1	...	...	1	...	1	...	...	2	5
Totals.....	9	1	1	21	35	37	9	18	24	155

FOUNTAIN DESCRIPTION.

- B. Indicates fountain for beasts only. Continuous flow of water during year.
D. Indicates fountain for man and beast. Automatic fixtures for both.
G. Indicates fountain for man and beast. Hygienic bubble fixture for man. Continuous flow of water for man and beast all the year.
H. Indicates fountain for man only. Water of ordinary temperature. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
I. Indicates taps on water posts, hydrants and fountains for watering horses.
J. Indicates fountains for man only. Cold water. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
K. Indicates fountain for man and beast, fitted with automatic fixtures controlled by self-closing cocks. Bubble fixture for man in warm weather. Continuous flow for beasts all the year.
L. Indicates fountain for man and beast, bubble fixtures for man and taps fitted for the purpose of filling pails to water horses. Continuous flow for beasts all the year.
M. Indicates fountain for beasts only, fitted with taps for the purpose of filling pails to water horses. Continuous flow for beasts all the year.

Table No. VI.
Maintenance of Main Pipe.

NATURE OF WORK.	Number of Jobs.	Total Cost.
Gate boxes renewed.....	690	\$23,176 98
Gates located, inspected (oiled, tested, etc.).....	1,973	971 41
Repaving (including contractor's miscellaneous jobs)	239	1,466 84
Leaking joints repaired.....	169	2,631 50
Gate boxes cleaned out.....	22	70 81
Gate boxes raised and lowered.....	351	844 95
Gates cleaned and salted.....	859	156 18
Repairs on bridges (on pipes, boxes, etc.).....	29	3,707 70
Dead ends blown off.....	309	435 10
Gate locations marked.....	8,914	1,609 84
Gates repaired, etc.....	10	123 68
Gates leaking at packing.....	46	179 33
Box tops renewed.....	65	456 69
Work caused by contractors, corporations and other services..	2	154 84
Leaks due to settlements and other causes.....	43	7,521 60
Gates renewed.....	6	399 31
Gate box covers (56) and frames (90) replaced.....	146	1,530 22
Cleaning main pipes (by contractors).....	13	4,227 53
Thawing main pipes (mains frozen, etc.).....	40	20,304 40
Miscellaneous jobs.....	28	409 86
Totals.....	13,954	\$70,378 77

Table No. VII.
Hydrants Established and Abandoned.

	ESTABLISHED.						ABANDONED.							
	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Batchelder and Finneran Post.	Totals.	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Chapman Post.	Batchelder and Finneran Post.	Boston.	Totals.
City proper.....	2			38	2	42	21	1	9	6		1	2	40
Roxbury.....			1	31		32	6	4	4	14			1	29
West Roxbury.....				32		32	3	1	6	9				19
Brighton.....		1		20		21	4		5	3				12
Dorchester.....		1		43		44	15	3	3	14			1	36
South Boston.....	1		2	54		57	29	3	9	11		1	6	59
East Boston (private).....				2		2								
East Boston.....				7		7		1	3	2				6
Charlestown.....				4		4	1		2	1				4
Hyde Park.....				25		25	1		1	7				9
Total public.....	3	2	3	254	2	264	79	14	41	61	7	2	10	214
Total private.....				2		2								

Table No. VIII.
Hydrant Repairs.

CAUSE OF REPAIRS.	Number of Jobs.	Net Cost.
Boxes raised, lowered, reset, repaired, renewed and pumped out,	625	\$8,122 93
Barrels changed, relocated, reset and repaired.....	1,145	3,612 32
Electrolysis.....	1	88 69
Hydrants frozen.....	518	640 89
Hydrants painted.....	3,224	1,028 22
Contractors, corporations and other departments.....	99	276 82
Repaving on account of repairs.....	225	1,823 80
Heavy teaming.....	138	1,269 98
Hydrants inspected, oiled and cleaned.....	49,817	10,405 32
Salt delivered to the Fire Department, 1,612 sacks.....		1,934 40
Totals.....	55,792	\$27,268 97

Table No. IX.
Statement of Service Pipes Laid and Abandoned.

SIZES OF SERVICES LAID AND ABANDONED.	CITY PROPER.		ROXBURY.		WEST ROXBURY.		BRIGHTON.		DORCHESTER.		SOUTH BOSTON.		EAST BOSTON.		CHARLES- TOWN.		HYDE PARK.		BOSTON HARBOR.		TOTALS.		
	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	Number of Services.	Length in Feet.	
1-inch laid	16	275	11	298	28	605	9	192	20	422	1	13	4	134	3	83	88	1,889	1	13	1	13	
1-inch abandoned	70	1,455	31	812	1	187	3	118	2	50	48	881	8	154	8	162	2	98	190	4,092	173	3,917	
2-inch laid	3	50			2	94	2	20	5	98	7	45			1	23	10	503	30	831	8	234	
2-inch abandoned	13	378	4	181	4	79	6	118	1	23	2	59			1	33	1	41	8	234	34	863	
3-inch laid	10	374			1	22				23	2	40	2	61	1	32	73	1,701	90	2,253	7	184	
3-inch abandoned	6	151								1	40	1	20		1	18	1	29	6	166	11	170	
4-inch laid	6	123	3	59	3	82	1	21	7	23	5	63	3	99	1	33	1	29	30	537	11	170	
4-inch abandoned	10	244	3	99	1	24	2	42	2	38	13	256	1	23			1	34	33	760	33	107	
5-inch laid	6	128	1	30							4	104	1	25	2	35			8	14	331	14	331
5-inch abandoned	57	1,078	6	65	3	19	6	132	2	40	23	461	5	120	1	3	2	76	105	1,994	105	1,994	
6-inch laid	14	364			1	11				1	250	3	105		1	4	1	40	16	379	16	379	
6-inch abandoned	1	4			1	26					1	131							7	429	7	429	
8-inch laid									1	193	1	28			3	215			2	34	2	34	
8-inch abandoned											1	28							5	539	5	539	
10-inch laid											1	28							1	28	1	28	
10-inch abandoned											2	30							2	30	2	30	
Total laid	118	2,471	28	732	42	928	26	525	38	832	71	1,594	17	506	11	392	104	2,599	1	8	456	10,588	
Total abandoned	114	2,651	31	812	3	220	3	118	5	136	62	1,121	10	215	12	249	77	1,869		317	317	7,391	
Net increase.	4		39	709	23	407			33	696	9	473	7	291	1	143	27	730	1	8	139	3,197	
Net decrease.		180	3	80																			

Table No. X.
Cost of New Service Pipes Laid.

Size.	Number.	Length in Feet.	Material.	Labor, Teaming, etc.	Repaving.	Blasting.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
¾-inch . . .	93	2,250	\$1,349 60	\$1,779 21	\$351 42	\$41 70	\$3,521 93	\$37 87	\$1 57
¾-inch . . .	10	283	207 87	195 05	17 83		420 75	42 04	1 13
1-inch . . .	11	235	274 20	204 22	117 31		595 73	54 16	2 53
1½-inch . . .					6 75		6 75		
1½-inch . . .	11	98	198 64	102 94			301 58	27 42	3 08
2-inch . . .	6	161	363 04	209 33			572 37	95 39	3 55
3-inch . . .	5	123	491 51	213 09		117 00	821 60	164 32	6 68
4-inch . . .	86	1,728	7,709 27	5,600 31	1,395 69		14,705 27	170 99	8 51
6-inch . . .	* 6	421	648 60	255 71			934 31	180 86	5 29
8-inch . . .	† 5	539	268 13	70 56			338 69	109 35	14 11
12-inch . . .					64 55		64 55		
Totals . . .	233	5,838	\$11,510 86	\$8,630 42	\$1,953 55	\$158 70	\$22,253 53		
3-inch . . .	† 1	8	20 21	9 81			30 02		
Totals . . .	233	5,846	\$11,531 07	\$8,640 23	\$1,953 55	\$158 70	\$22,283 55		

* One 6-inch service (250 feet) was a main pipe changed into a service at no cost to department.

† Three 8-inch services, aggregating 515 feet, were main pipes changed into services at no cost to department.

‡ This is not a new service — old 3-inch service reconnected.

Table No. XI.
Cost of Service Pipes Abandoned and Plugged.

Size.	Number.	Length in Feet.	Material.	Labor, Teaming, etc.	Repaving.	Total Cost.	Credit (Stock Returned.)	Net Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
¾-inch	1	13	\$0 09	\$1 07		\$1 16	\$0 78	\$0 38	\$0 38	\$0 03
¾-inch	113	2,282	26 96	1,044 49	\$264 22	1,335 67	275 47	1,060 20	9 38	46
¾-inch	2	46	41	17 35		17 76	3 22	14 54	7 27	32
1-inch	2	214	35	13 44		13 79	6 30	7 49	3 75	04
1½-inch	2	69	80	16 17		16 97	13 17	3 80	1 90	05
1½-inch	8	126	3 93	84 75		88 68	84 99	3 69	46	03
2-inch	1	17	68	24 93		25 61	13 23	12 38	12 38	73
3-inch	3	58	6 60	46 78		53 38	35 78	17 60	5 87	38
4-inch	11	303	98 85	272 29	47 03	418 17	253 19	164 98	15 00	54
6-inch	1	30	4 08	4 75		8 83	6 13	2 70	2 70	08
10-inch	1	2	47 30	30 12		77 42	38 10	39 32	39 32	19 68
Totals . . .	145	3,160	\$190 05	\$1,556 14	\$311 25	\$2,057 44	\$730 36	\$1,327 08		

Table No. XII.

Cost of Laying New Services, Excavating and Backfilling Done by Applicant.

SIZE.	Number.	Length in Feet.	Material.	Labor.	Teaming.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
1-inch.....	19	253	\$160 60	\$50 34	\$25 74	\$236 68	\$12 46	\$0 94
1-inch.....	8	49	54 34	17 09	7 02	78 45	9 81	1 60
1-inch.....	7	130	158 31	14 56	12 59	185 46	26 49	1 43
1½-inch.....	6	89	170 65	20 27	13 09	204 01	34 00	2 29
2-inch.....	11	183	452 16	50 83	19 66	522 65	47 51	2 84
3-inch.....	1	24	106 21	10 00	2 56	118 77	118 77	4 95
4-inch.....	12	161	881 14	173 45	38 60	1,093 19	91 10	6 79
Totals.....	64	889	\$1,983 41	\$336 54	\$119 26	\$2,439 21		

Table No. XIII.

Cost of Service Pipes, Replacing Others.

SIZE.	LAID.		ABANDONED AND PLUGGED.		Material.	Labor, Teaming, etc.	Repairing.	Blasting.	Total Cost.	Average Cost per Service.	Average Cost per Linear Foot.
	Number.	Length in Feet.	Number.	Length in Feet.							
1-inch.....	78	1,589	60	1,635	\$956 93	\$952 83	\$94 38	\$142 00	\$2,146 14	\$27 52	\$1 35
1-inch.....	12	499	6	188	283 15	291 54	14 35	94 83	683 87	56 99	1 37
1-inch.....	16	498	88	2,039	413 43	432 68	327 99		1,174 10	73 38	2 36
1½-inch.....	7	184	4	97	188 01	176 04	21 52		385 57	55 08	2 10
1½-inch.....	13	350	3	44	392 68	382 82	48 60		821 10	63 39	2 35
2-inch.....	16	416	2	90	777 70	552 28	67 95		1,397 93	87 37	3 36
3-inch.....	8	176	2	30	674 01	333 31	18 00		1,025 32	128 16	5 83
4-inch.....	7	105	5	76	491 88	370 67	25 19		887 74	126 82	8 45
6-inch.....	1	8	1	4	48 28	39 06			87 34	87 34	10 92
10-inch.....	1	28	1	28	110 82	69 25			180 07	180 07	6 43
Totals..	159	3,853	172	4,231	\$4,336 89	\$3,600 48	\$617 98	\$236 83	\$8,792 18		

Table No. XIV.
Service Pipe Repairs.

CAUSE OF REPAIRS.	Number of Jobs.	Net Cost.
Boxes established, repaired, regulated and renewed.....	263	\$4,429 60
Cocks established, repaired and regulated.....	120	1,391 81
Church cocks replaced with sidewalk cocks.....	1,304	7,276 73
Gates defective.....	12	332 07
Eaten by electrolysis and ashes.....	22	390 27
Defective pipe.....	1,694	24,062 75
Pipes to be regulated.....	11	126 97
Main pipe construction.....	9	38 88
Repairs on account of contractors, corporations and other departments.....	493	4,532 75
Frost.....	2,417	31,550 86
Heavy teaming.....	13	118 36
Repaved on account of repairs.....	846	6,718 72
Rust, dirt and fish.....	889	4,111 50
Uprights established, renewed, repaired, relocated and regu- lated.....	4,692	3,297 46
Letting on and shutting off water.....	8,743	12,510 78
Investigations.....	1,086	3,291 69
Totals.....	22,614	\$104,181 20

Table No. XV.
Fountain Repairs, 1918.

CAUSES.	Jobs.	Cost.
Cocks leaking.....	90	\$469 30
Waste pipe filled with dirt.....	46	387 62
Cock handles broken.....	6	16 66
Bad paving.....	3	13 14
Drain pipe broken.....	1	28 09
Base loose, hit by team.....	7	86 24
Repaired gratings.....	3	11 43
Decayed boxes.....	3	29 05
Boxes put to grade.....	1	11 50
Shutting off and letting on.....	65	62 70
Totals.....	225	\$1,116 33

There were no fountains established, abandoned or changed.

Table No. XVI.
Water Posts Abandoned.

	Material.	Labor and Teaming.	Total.
357 Commonwealth avenue.....	\$11 56	\$11 56

Table No. XVII.
Standpipes for Street Watering by Electric Cars.

C street, south of Broadway, South Boston.
Dorchester avenue, at Hyde street, South Boston.
Farragut road, at Fourth street, South Boston.
Emerson street, west of I street, South Boston.
Dorchester street, at Ninth street, South Boston.
Opposite 723 Broadway, South Boston.
Opposite 50 Dorchester avenue, South Boston.
Dorchester street, north of Broadway, South Boston.
Dorchester avenue, at Seventh street, South Boston.
Dorchester avenue, at Ellet street, Dorchester.
Dorchester avenue, at Columbia road, Dorchester.
Dorchester avenue, at Savin Hill avenue, Dorchester.
Dorchester avenue, at Park street, Dorchester.
Dorchester avenue, at Walles avenue, Dorchester.
Dorchester avenue, at Beal street, Dorchester.
Dorchester avenue, at St. Gregory court, Dorchester.

	Material.	Labor and Teaming.	Total.
Sixteen car hydrants established.....	\$1,729 45	\$724 57	\$2,454 02

Table No. XVIII.
Water Post Repairs, 1918.

CAUSES.	Number of Jobs.	Cost.
Water post valve leaking.....	40	\$58 49
Defective paving.....	5	25 42
Covers, broken.....	3	26 16
Shut off and let on.....	39	106 11
Pipes broken inside post.....	6	90 44
Decayed post boxes.....	21	418 63
Cocks broken.....	8	56 50
Posts hit by teams.....	9	113 68
Relocate.....	1	26 84
Boxes put to grade.....	2	18 99
Post arms broken.....	2	5 51
Totals.....	136	\$946 77

Table No. XIX.

Meters Set for Meter Branch.

NUMBER SET.		Size.	Cost of Material.	Cost of Labor, Teaming and Car Fare.	Total.
Outside.	Inside.				
11.....	6	$\frac{1}{4}$ -inch	\$105 16	\$117 14	\$222 30
		$\frac{1}{2}$ -inch	4 46	22 07	26 53
6.....	1	$\frac{1}{2}$ -inch	57 43	55 29	112 72
		$\frac{1}{4}$ -inch	85	6 42	7 27
4.....		1-inch	44 88	47 76	92 64
3.....		$1\frac{1}{4}$ -inch	39 13	35 92	75 05
1.....		2-inch	8 30	14 50	22 80
2.....		3-inch	15 87	18 47	34 34
2.....		6-inch	131 37	163 16	294 53
1.....		8-inch	24 38	1 12	25 50
30.....	7		431 83	481 85	* 913 68

* Above is exclusive of cost of meters.

Table No. XX.

Meters Repaired for Meter Branch.

CAUSES.	Jobs.	Cost.
Meters leaking.....	382	\$1,006 32
Meters frozen.....	60	519 10
New chambers.....	3	323 15
Decayed boxes.....	90	2,359 78
Changes.....	220	723 13
Bad paving.....	17	336 89
Meters reset.....	445	1,157 26
Meters taken out.....	190	530 27
Boxes put to grade.....	15	82 65
New frames and covers.....	2	10 07
New sidewalk upright.....	1	31 70
New gate valve.....	1	15 64
Cover broken.....	1	31 70
Totals.....	1,427	\$7,127 66

Table No. XXI.

Machine Shop.

Stock Manufactured from the Rough.

KIND.	Number.	Labor.	41 Per Cent Added.	Stock.	Cost. Each.	Total Cost.
Ordinary post hydrant, No. 2.....	69	\$12 48	\$17 60	\$39 50	\$57 10	\$3,939 90
3-inch blow-off gates.....	15	8 63	12 17	15 04	27 21	408 15
4-inch gates.....	79	6 78	9 56	11 96	21 52	1,700 08
6-inch gates.....	205	8 75	12 34	21 62	33 96	6,961 80
8-inch gates.....	33	9 90	13 96	31 55	45 51	1,501 83
10-inch gates.....	11	13 69	19 30	50 55	69 85	768 35
12-inch gates.....	49	15 43	21 76	62 71	84 37	4,134 13
16-inch gates.....	7	31 90	44 98	87 71	132 79	929 53
20-inch gates.....	2	104 15	146 85	239 05	385 90	771 80
1-inch sidewalk cocks.....	1,443	71	1 00	1 22	2 22	3,203 46
1-inch sidewalk cocks.....	21	83	1 17	1 50	2 67	56 07
1-inch sidewalk cocks.....	11	1 03	1 45	1 78	3 23	35 53
1-inch corporation cocks.....	942	54	76	46	1 22	1,149 24
1-inch corporation cocks.....	17	32	45	38	83	14 11
1-inch corporation cocks.....	27	98	1 38	1 25	2 63	71 01
1 1/2-inch corporation cocks.....	101	1 20	1 69	2 48	4 17	421 17
1 1/2-inch water post cocks.....	5	1 29	1 82	2 68	4 50	22 50
2-inch air cocks.....	15	5 27	7 43	4 34	11 77	176 55
1-inch female coupling nuts.....	98	03	04	058	098	9 60
1-inch female coupling nuts.....	2,241	04	06	069	129	289 09
1 1/2-inch female coupling nuts.....	233	12	17	41	58	135 14
1-inch female coupling tubes.....	2,884	03	04	05	09	259 56
1-inch female coupling tubes.....	477	06	08	11	19	90 63
1-inch female coupling tubes.....	100	08	11	16	27	27 00
1 1/2-inch female coupling tubes.....	109	12	17	34	51	55 59
2-inch female coupling tubes.....	34	14	20	49	69	23 46
1 1/2-inch combination couplings.....	106	36	51	1 03	1 54	163 24
1 1/2-inch male couplings.....	37	14	20	55	75	27 75
2-inch male couplings.....	50	20	28	78	1 06	53 00
1-inch meter bushings.....	400	18	25	32	57	228 00
Hydrant wastes.....	391	27	38	36	74	289 34
Installing bushings in sidewalk uprights..	1,237	07	10	16	26	321 62
Total.....						\$28,238 23

Table No. XXII.
Machine Shop.—Concluded.
Stock Repaired and Miscellaneous Work.

	Number.	Total Cost.
4-inch gates.....	11	\$29 32
6-inch gates.....	30	117 68
8-inch gates.....	2	14 27
10-inch gates.....	4	10 66
12-inch gates.....	7	46 96
20-inch gates.....	2	45 51
24-inch gates.....	2	59 30
4-inch Smith gates.....	1	5 78
Lowry hydrants.....	21	139 29
Boston post hydrants.....	51	515 33
Batchelder hydrants.....	21	293 29
Ordinary post hydrants.....	11	32 70
1-inch coupling nuts (service pipe stock).....	566	44 68
Installing air tank in shop.....	1	383 47
Stock consigned to junk (labor only).....		23 67
Totals.....		\$1,812 93

Table No. XXIII.

Blacksmith Shop.

Sharpened 4,833 picks, 1,102 bars and 1,428 chisels	\$1,510 47
Repaired 4,108 various kinds of tools	1,568 44
Made 132 various kinds of small tools	190 96
Erecting door in water tower, East Boston	48 50
Twelve wagons repaired	48 00
Repaired fence, East Boston reservoir	24 01
Various small repairs in yard, 710 Albany street	17 11
Total	<u>\$3,407 48</u>

Table No. XXIV.

Pattern Shop.

Repaired 18 patterns	\$357 97
Made 11 new patterns	449 96
Storing patterns (labor only)	66 39
Total	<u>\$874 32</u>

Table No. XXV.
Carpenter Shop.
Stock Manufactured.

	Number.	Total Cost.
Lowry hydrant boxes at \$7.05.....	37	\$260 85
Boston Lowry hydrant boxes at \$9.50.....	30½	289 75
Post hydrant boxes at \$7.77.....	30	283 10
Small gate boxes at \$5.93.....	37	219 41
Large gate boxes at \$7.34.....	4	29 36
Meter boxes at \$6.76.....	17	114 92
Boston hydrant boxes at \$6.57.....	6	39 42
Deacon meter boxes at \$7.34.....	11	80 74
Tops for Lowry hydrant boxes at \$0.99.....	45	44 55
Tops for small gate boxes at \$0.76.....	50	38 00
Tops for large gate boxes at \$0.99.....	18	17 82
Pieces for raising Lowry hydrant boxes at \$0.11 per inch.....	1,366 in.	150 26
Pieces for raising meter boxes at \$0.10 per inch.....	1,014 in.	101 40
Pieces for raising small gate boxes at \$0.10 per inch.....	2,056 in.	205 60
Pieces for raising large gate boxes at \$0.11 per inch.....	200 in.	22 00
Wedges for main pipe work, etc.....	1,234	23 54
Made various size plugs.....	101	134 88
Made circles for bridge pipes.....	80	45 87
Made wooden horses.....	18	17 39
Total.....		\$2,068 86

Table No. XXVI.
Carpenter Shop.

Repaired shed and various repairs at East Boston yard	\$748 05
General repairs in meter shop, 710 Albany street	617 41
General repairs in stable, 710 Albany street	509 02
Repaired 461 tools	352 45
Repairs in "Library" at yard, 710 Albany street	321 57
Various repairs at Brighton yard	302 40
Repairs in machine shop, 710 Albany street	287 16
General repairs in Charlestown yard	119 09
Various repairs around yard, 710 Albany street	117 98
Repaired fence and gate at East Boston reservoir	104 39
Made 3 new tools	70 73
Work done for engineers at City Hall Annex	69 02
General repairs at Dorchester yard	64 42
Nineteen wagon repairs	57 05
Work for Income Branch, City Hall Annex	56 56
General repairs in West Roxbury yard	55 13
Carried forward	\$3,862 38

<i>Brought forward</i>	\$3,862 38
Repairs in auto repair shop, 710 Albany street	47 15
Boxed patterns to ship to foundry	39 50
Repairs in storeroom, 710 Albany street	36 06
Repairs at Orient Heights standpipe, East Boston	34 78
Repairs in blacksmith shop, 710 Albany street	23 39
Repairs in office at 710 Albany street	7 44
Repairs in plumbing shop, 710 Albany street	6 64
General repairs in Hyde Park yard	6 34
Miscellaneous work	59 83
Total	<u>\$4,113 51</u>

Table No. XXVII.

Plumbing Shop.

Installing dry system of automatic sprinklers in stable and garage, 710 Albany street	\$3,249 58
Accommodation work for other services	86 99
Various repairs around yard, 710 Albany street	67 38
Repairs in Charlestown yard	47 09
Repaired 17 pumps	44 15
Repairs in machine shop	34 49
Repaired pressure gauge, Boston Common	31 99
Repairs in stable, 710 Albany street	21 77
Made 3 new tools	18 38
Repaired 5 tools	15 98
Repairs in blacksmith shop, 710 Albany street	3 45
Miscellaneous work	8 40
Total	<u>\$3,629 55</u>

Table No. XXVIII.

Miscellaneous.

Changed machine shop from steam power to electric power,	\$3,138 75
Seventeen hundred and fifty-two inspections of patch paving,	1,418 15
Delivering water to contractors, corporations, other services and dwelling houses	726 24
Fourteen Deacon meter boxes renewed at various locations,	360 49
Accommodation work at Army Base, South Boston	324 14
General electric repairs in Albany street yard	278 17
Accommodation work for other services and departments,	267 54
Connecting drain for Boston & Lockport Block Company at East Boston	231 41
Twenty-eight days' inspection on main pipe changes	89 10
Accommodation work for private persons and corporations,	56 83
Electrical repairs on two gasoline pumps	54 32
Repairs on harbor boat "Watercrest"	52 59
Setting up Peerless pressure gauge, 320 East Eagle street, East Boston	48 26
Electrical work on new sprinkler system in stable and garage, 710 Albany street	40 69
Various small repairs in district yards	17 98
Miscellaneous work	52 18
Total	<u>\$7,156 84</u>

Cost of Extension of Main Pipe.

Street.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
Mechanic street.....	From Brighton avenue.....	Brighton.	4	37	\$144 05	\$27 25	.....	\$171 30	Public, macadam, rock.
Delano street.....	From Levant street.....	Dorchester.	6	131	264 40	181 22	\$8 30	453 92	Private, macadam.
Short road.....	From Grove street.....	West Roxbury.	6	46	128 22	204 88	4 15	337 25	Private, rock, unconstructed.
Birch road.....	From Grove street.....	West Roxbury.	6	46	98 87	110 00	4 15	213 02	Private, rock, unconstructed.
Grove road.....	From Grove street.....	West Roxbury.	6	48	126 99	59 88	4 15	191 02	Private, unconstructed.
Wallace park.....	From Bourne street.....	West Roxbury.	6	182	369 13	204 00	10 39	583 52	Private, gravel.
Metropolitan avenue.....	Beacon street and Neponset River,	Hyde Park.	6	225	435 11	215 20	12 48	662 79	Private, unconstructed.
Norway park.....	Summit street and Warren avenue,	Hyde Park.	6	440	639 02	490 60	15 84	1,145 46	Public, gravel.
	Totals.....	.....	6	1,118	\$2,061 74	\$1,465 78	\$59 46	\$3,586 98	
West Sixth street.....	Dorchester avenue and B street.....	South Boston.	8	216	\$418 63	\$1,566 04	\$186 65	\$2,171 32	Public, granite block, gravel base.
Richards street.....	A street and Granite street.....	South Boston.	8	194	382 51	300 00	20 78	703 29	Public, granite block, gravel base.
Pontiac street.....	Tremont street and Hillaide street,	Roxbury.	8	390	773 25	1,015 98	87 26	1,876 49	Public, rock, under construction.
Alleghany street.....	From Pontiac street.....	Roxbury.	8	33					
Regina street.....	From Washington street.....	Dorchester.	8	25	43 73	28 75	.....	72 48	Private, unconstructed.
Mattapan street.....	Across Fottler road.....	Dorchester.	8	21	79 45	17 85	1 42	98 72	Public, macadam.
Deer street.....	From Roach street.....	Dorchester.	8	89	286 05	68 41	.....	324 46	Private, unconstructed.
Mahler street.....	At Washington street.....	West Roxbury.	8	26	167 13	54 13	.....	221 26	Private, unconstructed.
Walden street.....	From Washington street.....	West Roxbury.	8	28	169 44	55 13	.....	224 57	Private, unconstructed.

Cost of Extension of Main Pipe.—Concluded.

Street.	Location.	District.	Size. (Inch.)	Feet.	Cost of Depart- ment Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
Altair road.....	From Grove street.....	West Roxbury.	8	22	\$107 16	\$35 81	\$4 15	\$147 12	Private, unconstructed.
Parkman street.....	Brooks street and Charles river....	Brighton.	8	416	782 58	524 15	60 25	1,366 98	Private, unconstructed.
Harvey Steel road.....	From Everett street.....	Brighton.	8	579	954 57	509 50	43 63	1,507 70	Private, unconstructed.
Yull circle.....	From Milton street.....	Hyde Park.	8	620	1,155 36	752 40	19 60	1,927 36	Private, gravel.
Moody street.....	Roanoke avenue and Ashland street.	Hyde Park.	8	220	357 92	310 27	20 78	688 97	Private, rock, unconstructed.
Runkin road.....	From Wood avenue.....	Hyde Park.	8	535	883 15	919 44	74 79	1,877 38	Private, rock, unconstructed.
Providence street.....	From Hyde Park avenue.....	Hyde Park.	8	604	184 11	48 40	5 76	238 27	Private, macadam.
Dana avenue.....	Washington street and Milton avenue.	Hyde Park.	8	133	218 56	142 84	11 30	372 70	Public, macadam.
Washington street.....	Totals.....	.....	8	3,807½	\$6,033 60	\$6,439 10	\$536 37	\$13,909 07	
Devonshire street.....	South from Broadway Extension..	City Proper.	10	67	\$315 76	\$163 75	.....	\$479 51	Public, granite block, concrete base.
Custom House street.....	Summer street and Winthrop square.	City Proper.	10	146	253 22	262 57	\$24 93	530 72	Public, granite block, concrete base.
First street.....	Broad and India streets.....	City Proper.	10	173	441 32	420 00	20 78	882 10	Public, granite block, gravel base.
Second street.....	Colton and Granite streets.....	South Boston.	10	193	431 87	424 48	24 90	881 25	Public, granite block, gravel base.
Third street.....	Service road and end of 8-inch main from River street.	Dorchester.	10	498	1,233 62	644 62	51 88	1,930 12	Private, rock, hospital grounds.
Fourth street.....	From Spring street.....	West Roxbury.	10	730	1,046 20	3,809 16	98 14	5,853 50	Public, rock, ordered for con- struction.

Loebdale road.....	From Washington street.....	West Roxbury.	10	28	214 89	49 44	264 33	Private, unconstructed.
Commonwealth avenue.....	Opposite Foster street.....	Brighton.	10	88	356 43	836 96	1,218 32	Public, macadam.
Foster street.....	At Commonwealth avenue.....	Brighton.	10	15		24 93		
	Totals.....		10	1,928	\$5,193 31	\$5,600 98	\$245 56	\$12,039 85
Atlantic avenue.....	From India street to Belcher lane,	City Proper.	12	88	1,991 94	1,876 04	3,920 99	Public, granite block, gravel base.
High street.....	From Atlantic avenue.....	City Proper.	12	130		52 71		
Portland street.....	At Merrimac street.....	City Proper.	12	20	61 76	56 00	117 76	Public, granite block, gravel base.
Richmond street.....	North and Hanover streets.....	City Proper.	12	145	910 00	614 31	1,540 21	Public, granite block, concrete base.
North street.....	Fulton place and Richmond street.	City Proper.	12	123			1,954 25	Public, granite block, concrete base.
Purchase street.....	Oliver and Pearl streets.....	City Proper.	12	353	1,033 21	867 09	102 31	Public, granite block, gravel base.
Lehigh street.....	Albany street and Broadway.....	City Proper.	12	30	68 06	34 25	537 04	Public, gravel.
Barlington avenue.....	From Brookline avenue.....	Roxbury.	12	94	359 64	189 10	182 31	Public, macadam.
Cedar street.....	Sanford and Manchester streets.....	Dorchester.	12	40	136 67	42 56		
Manchester street.....	Cedar and Groveland streets.....	Dorchester.	12	478				
Private land.....	Service road and Standard street.	Dorchester.	12	357	2,338 15	1,165 00	107 90	Private, rock, unconstructed.
Idaho street.....	From Manchester street.....	Dorchester.	10	10				
Faneuil street.....	At Brooks street.....	Brighton.	12	10	85 00	30 50	115 50	Public, macadam.
Tyler street.....	From Water street.....	Hyde Park.	12	316	1,417 81	501 59	1,930 02	Public, gravel.
Tyler street.....	Washington and Loring streets.....	Hyde Park.	12	118			795 28	Public, rock, gravel.
Wood avenue.....	Roscoe and Ruskin roads.....	Hyde Park.	12	208	492 33	286 33		
	Totals.....		12	3,010	\$8,894 57	\$5,662 77	\$284 08	\$14,841 42
			10	10				

Cost of Extension of Main Pipe.—*Concluded.*

Street.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
Altair road.....	From Grove street.....	West Roxbury.	8	22	\$107 16	\$35 81	\$4 15	\$147 12	Private, unconstructed.
Parkman street.....	Brooks street and Charles river....	Brighton.	8	416	782 58	524 15	60 25	1,366 98	Private, unconstructed.
Harvey Steel road.....	From Everett street.....	Brighton.	8	579	954 57	599 50	43 63	1,597 70	Private, unconstructed.
Yull circle.....	From Milton street.....	Hyde Park.	8	620	1,155 36	752 40	19 60	1,927 36	Private, gravel.
Moody street.....	Raonke avenue and Ashland street.	Hyde Park.	8	220	357 92	310 27	20 78	688 97	Private, rock, unconstructed.
Runkin road.....	From Wood avenue.....	Hyde Park.	8	535	883 15	919 44	74 79	1,877 38	Private, rock, unconstructed.
Providence street.....	From Hyde Park avenue.....	Hyde Park.	8	604	184 11	48 40	5 76	238 27	Private, macadam.
Dana avenue.....	Washington street and Milton avenue.	Hyde Park.	8	133	218 56	142 84	11 30	372 70	Public, macadam.
	Totals.....		8	3,607 1/2	\$6,933 60	\$6,439 10	\$536 37	\$13,909 07	
Washington street.....	South from Broadway Extension....	City Proper.	10	67	\$315 76	\$103 75	.....	\$479 51	Public, granite block, concrete base.
Devonshire street.....	Summer street and Winthrop square.	City Proper.	10	146	253 22	252 57	\$24 93	530 72	Public, granite block, concrete base.
Custom House street.....	Broad and India streets.....	City Proper.	10	173	441 32	420 00	20 78	882 10	Public, granite block, gravel base.
West street.....	Colton and Granite streets.....	South Boston.	10	193	431 87	424 48	24 90	881 25	Public, granite block, gravel base.
South Boston Consumptive's hospital grounds.	Service road and end of 8-inch main from River street.	Dorchester.	10	488	1,233 62	644 62	51 88	1,930 12	Private, rock, hospital grounds.
From Spring street.....	From Spring street.....	West Roxbury.	10	730	1,946 20	3,809 16	98 14	5,853 50	Public, rock, ordered for construction.

Lochdale road.....	From Washington street.....	West Roxbury.	10	28	214 89	49 44	264 33	Private, unconstructed.
Commonwealth avenue.....	Opposite Foster street.....	Brighton.	10	88	356 43	836 96	24 93	Public, macadam.
Foster street.....	At Commonwealth avenue.....	Brighton.	10	15				
	Totals.....		10	1,928	\$5,193 31	\$6,000 98	\$245 56	\$12,039 85
Atlantic avenue.....	From India street to Belcher lane,	City Proper.	12	88	1,991 94	1,876 04	52 71	Public, granite block, gravel base.
High street.....	From Atlantic avenue.....	City Proper.	12	130				
Portland street.....	At Merimac street.....	City Proper.	12	20	61 76	56 00		Public, granite block, gravel base.
Richmond street.....	North and Hanover streets.....	City Proper.	12	145	910 00	614 31	24 90	Public, granite block, concrete base.
North street.....	Fulton place and Richmond street.	City Proper.	12	123				Public, granite block, concrete base.
Purchase street.....	Oliver and Pearl streets.....	City Proper.	12	353	1,033 21	867 09	53 95	Public, granite block, concrete base.
Lehigh street.....	Albany street and Broadway.....	City Proper.	12	30	68 06	34 25		Public, granite block, gravel base.
Burlington avenue.....	From Brookline avenue.....	Roxbury.	12	94	359 64	189 10	8 30	Public, gravel.
Cedar street.....	Sanford and Manchester streets.....	Dorchester.	12	40	136 67	42 56	3 06	Public, macadam.
Manchester street.....	Cedar and Groveland streets.....	Dorchester.	12	478				
Private land.....	Service road and Standard street.	Dorchester.	12	257	2,338 15	1,165 00	107 90	Private, rock, unconstructed.
Idaho street.....	From Manchester street.....	Dorchester.	10	10				
Faneuil street.....	At Brooks street.....	Brighton.	12	10	85 00	30 50		Public, macadam.
Tyler street.....	From Water street.....	Hyde Park.	12	316	1,417 81	501 59	16 62	Public, gravel.
Tyler street.....	Washington and Loring streets.....	Hyde Park.	12	118				
Wood avenue.....	Roanoke and Ruskin roads.....	Hyde Park.	12	206	492 33	286 33	16 62	Public, rock, gravel.
	Totals.....		12	3,010	\$5,894 57	\$5,662 77	\$284 06	\$14,841 42
			10	10				

Cost of Replacement of Main Pipe.

Street.	Location.	District.	Size. (Inch.)	Feet.	Cost of Depart- ment Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size. (Inch.)	Remarks.
Barnard place.....	From 540 Third street.....	South Boston.	6	150	\$242 99	\$372 06	\$10 39	\$825 44	4	Private, unconstructed.
Gold street.....	A and B streets, over railroad bridge.....	South Boston.	4	93 48	145 25	25 41	4 15	174 81	4	
Silver street.....	Opposite No. 160.....	South Boston.	6	7	68 29	61 09	.....	129 38	6	
Van Rensselaer place.....	From Tremont street.....	City..	6	65	194 50	60 23	.....	254 73	6	Public.
Shepard street.....	From Bowdoin street.....	Dorchester.	6	258	519 51	220 31	.....	739 82	14	Private, unconstructed.
Greenwood park.....	From Park street.....	Dorchester.	6	171	372 69	342 29	16 60	731 58	1	Public, macadam.
Salisbury park.....	From Park street.....	Dorchester.	6	174	362 78	346 07	12 45	721 30	1	Public, macadam.
Cottage park.....	From Bowdoin street.....	Dorchester.	6	256	487 49	612 03	41 50	1,141 02	14	Private, unconstructed.
Montgomery street.....	From Spring street.....	West Roxbury.	6	75	70 13	97 22	.....	167 35	6	Private, unconstructed.
Norway park.....	Summit street and Warren avenue.	Hyde Park.	6	312	453 59	347 88	11 23	812 70	4	Public, gravel.
Milton square.....	From Highland street.....	Hyde Park.	6	30	192 54	73 00	9 00	274 54	4	Public, macadam.
Milton square.....	From Milton avenue.....	Hyde Park.	6	30	.....	.....	.....	.....	.....	.....
Totals.....		.....	6	1,699	\$3,109 76	\$2,557 59	\$105 32	\$5,772 67	.....	.....
Lewis Wharf, South.....	At Atlantic avenue.....	City.	8	48	\$92 78	\$193 19	\$9 00	\$294 97	6	Private, granite block, gravel base.
Friend street.....	Hanover and Union streets.....	City.	8	398	590 81	741 68	37 35	1,369 84	6	Public, granite block, gravel base.
Commercial Wharf, North.	At Atlantic avenue.....	City.	8	64	108 71	257 58	12 45	378 74 0 8	8	Private, granite block, gravel base.
Commercial Wharf, South.	At Atlantic avenue.....	City.	8	48	81 25	193 19	20 75	295 19	8	Private, granite block, gravel base.

	City.	8	50	78 61	201 24	12 45	292 30	
Lewis Wharf, North.	At Atlantic avenue.	8	50	78 61	201 24	12 45	292 30	8 Private, granite block, gravel base.
Sixth street.	L street and Columbia road.	8	2,805					
Peters street.	At Sixth street.	6	4	4,551 85	3,083 65	207 75	7,853 25	6 Public, granite block, granite base.
Monks street.	At Sixth street.	6	4					
I street.	Across Broadway.	8	84	195 09	92 40	13 23	301 32	6 Public, granite block, gravel base.
Emerson street.	East from I street.	8	129	248 87	151 40	23 63	423 90	6 Public, granite block, gravel base.
Emerson street.	From I street, west of Broadway.	8	35	140 53	38 50	2 08	181 11	6 Public, granite block, gravel base.
Athens street.	Over railroad bridge.	8	127	96 27	1,182 93	29 39	1,308 59	
		{	12					
Silver street.	Over railroad bridge.	8	133 1	125 54	1,112 06	134 93	1,372 55	
Fifth street.	Dorchester avenue and B street.	8	545	744 54	2,506 99	150 44	3,491 97	
West Sixth street.	Dorchester avenue and B street.	8	85	146 82	354 68	22 13	521 63	6 Public, granite block, gravel base.
Downer court.	From Bowdoin street.	8	92	224 92	103 44		338 36	1 Private, gravel.
Mattapan street.	Across Fottler road.	8	40	151 32	34 00	2 72	188 04	6 Public, macadam.
Moody street.	From Dunbar avenue.	8	23	103 45	19 55	4 16	127 16	6 Public order for construction.
Bishop street.	At Elm street.	8	5	25 69	4 25	3 12	33 06	6 Public, macadam.
Griggs place.	From Allston street.	8	78	193 60	101 50	4 15	299 25	6 Private, gravel.
Collins street.	Hyde Park avenue and Bradlee street.	8	645	1,179 74	1,273 75	72 96	2,526 45	6 Public, gravel.
							4	
Highland street.	Milton and Metropolitan avenues.	8	614	1,107 47	693 03	29 50	1,830 00	4 Public, macadam.
Huntington avenue.	From Collins street.	8	119	404 19	202 75	5 76	612 70	4 Public, gravel.
Dana avenue.	Washington street and Milton avenue.	8	686	1,126 04	736 76	58 31	1,921 11	4
							4	
Naponequet avenue.	Washington street and Milton line.	8	600	1,168 99	669 64	59 94	1,898 57	4
							4	
		{	7,453	\$12,897 68	\$14,048 16	\$914 22	\$27,760 06	
	Totals.	6	20					

Cost of Replacement of Main Pipe.—Continued.

STREET.	Location.	District.	Size. (Inch.)	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size. (Inch.)	Remarks.
Utica street.....	Beach and Kneeland streets.....	City.	10	297	\$624 35	\$935 85	\$29 09	\$1,589 29	6	Public, granite block, gravel base.
M street.....	At Seventh street.....	South Boston.	10	51	309 00	39 75	2 08	350 83	6	Public, macadam.
M street.....	Across Sixth street.....	South Boston.	10	50	208 51	48 00	16 62	273 13	6	Public, granite block, gravel base.
Broadway.....	A and B streets.....	South Boston.	10	223	926 51	88 31		1,014 82		
Hiawatha road.....	From Blue Hill avenue.....	Dorchester.	10	1,045	2,152 89	1,005 04	108 89	3,266 82	6	Public, macadam.
Fottler road.....	Mattapan and Walk Hill streets.....	Dorchester.	10	234	635 19	275 68	49 86	960 73	6	Public, macadam.
Walk Hill street.....	At Fottler road.....	Dorchester.	12	8					12	
Dunbar avenue.....	Washington and Moody streets.....	Dorchester.	10	276	687 16	272 03	49 86	1,009 05	6x10	Public, order for construction.
Fletcher street.....	South and Centre streets.....	West Roxbury.	10	1,547	3,395 84	1,054 02	101 94	5,151 80	6x8	Public, macadam.
Harris avenue.....	Centre and Alveston streets.....	West Roxbury.	10	683	1,601 87	534 22	41 55	2,177 64	6	Public, macadam.
Alveston street.....	At Harris avenue.....	West Roxbury.	10	8						
Roxnoke avenue.....	Alveston and Elm streets.....	West Roxbury.	10	609	1,549 70	512 80	41 55	2,104 05	6	Public, macadam.
Elm street.....	Bishop and Everett streets.....	West Roxbury.	10	396	1,122 76	302 43	16 62	1,441 81	6	Public, macadam.
Revere street.....	At Roxnoke avenue.....	West Roxbury.	10	15	111 65	13 60	8 31	133 56	5	Public, macadam.
Orchard street.....	Centre and Pond streets.....	West Roxbury.	10	131						
Allston street.....	Commonwealth and Brighton avenues.	Brighton.	10	1,615	4,007 67	1,396 60	79 34	5,483 61	6	Public, macadam.
Long avenue.....	From Allston street.....	Brighton.	10	1,344						
Halle place.....	From Allston street.....	Brighton.	10	6	2,923 76	2,094 34	132 80	5,152 90	6	Public, macadam, rock

Graylock avenue.....	From Allston street.....	Brighton.	10	564	1,213 12	629 76	24 90	1,807 78	0	Private, gravel.
Milton avenue.....	Beacon and Prospect streets.....	Hyde Park.	10	905	2,499 75	1,106 87	58 63	3,665 25	0	Public, macadam.
Washington street.....	Neponset and Garfield avenues.....	Hyde Park.	10	640	1,894 41	777 22	56 44	2,728 07	0	Public, macadam.
Summit street.....	Neponset and Williams avenues.....	Hyde Park.	10	390	1,079 44	412 42	39 38	1,531 24	0	Public, macadam.
	Totals.....		10	10,898	\$26,945 58	\$12,088 86	\$857 04	\$39,902 38		
			6	4						
			8	13						
			12	8						
Broad street.....	Atlantic avenue and India street.....	City.	12	263	\$1,284 23	\$796 42	\$66 40	\$2,127 05	12	Granite blocks (gravel base).
India street.....	From Broad street.....	City.	12	34					12	Public.
Mott street.....	Harrison avenue and Washington street.....	City.	12	325	972 89	663 16	49 80	1,685 85	12	Public, asphalt.
N street.....	At Seventh street.....	South Boston.	12	41	71 35	32 25	4 15	107 75	6	Public, macadam.
N street.....	Across Sixth street.....	South Boston.	12	63	606 21	54 25	14 62	675 08	6	Public, granite block, gravel base.
Broadway.....	A and B street over bridge.....	South Boston.	12	131	267 81	1,381 36	75 72	1,724 89		
Third street.....	Over railroad bridge.....	South Boston.	12	136	220 87	1,400 76	46 97	1,668 60		
Fourth street.....	A and B streets over railroad bridge.....	South Boston.	12	191	555 72	164 95	.....	720 67	20	
Fifth street.....	Dorchester avenue and B street.....	South Boston.	12	128	279 39	2,031 20	54 20	2,564 79	.....	Public.
Seventh street.....	Over railroad bridge.....	South Boston.	12	103	353 61	87 56	.....	441 17	12	Public.
Columbus avenue.....	At Roxbury Crossing.....	Roxbury.	12	27	79 60	251 68	15 36	346 54	12	Public, granite block, gravel base.
Cedar street.....	Sanford and Manchester streets.....	Dorchester.	12	282	962 62	300 04	21 71	1,284 37	6	Public, macadam.
Hall street.....	Call street and railroad.....	West Roxbury.	12	330	1,163 83	223 40	27 19	1,424 42	6	Public, macadam.
Pond street.....	At Orchard street.....	West Roxbury.	12	14	293 12	30 00	3 12	326 24	12	Public, macadam.

Cost of Replacement of Main Pipe.—*Concluded.*

Street.	Location.	District.	Size (Inch.)	Feet.	Cost of Depart- ment Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size (Inch.)	Remarks.
Oakland street.....	Arlington and Bennett streets.....	Brighton.	12	116	\$174 63	\$289 90	\$37 40	\$501 92	12	Public, macadam.
Milton avenue.....	From Summit street.....	Hyde Park.	12	20	513 67	80 30	10 50	604 47	6 & 14	Public, macadam.
Summit street.....	At Milton avenue.....	Hyde Park.	12	45	.....	.....	.....	.....	14	.....
	Totals.....	.....	12	2,249½	\$7,779 44	\$7,797 23	\$427 14	\$16,003 81	.....	.....
Fourth street.....	At A street.....	South Boston.	16	21	\$691 72	\$249 73	.....	\$941 45	20	Public, granite block, gravel base.
Dorchester avenue.....	Over railroad bridge.....	South Boston.	16	163½	130 61	1,844 08	\$99 91	2,074 60	16	.....
	Totals.....	.....	.....	194½	\$822 33	\$2,093 81	\$99 91	\$3,016 03	.....	.....
Southampton street.....	In New York, New Haven & Hartford Railroad, classification yard,	South Boston.	16 { 30	629 204	\$4,206 12	.....	\$12 45	\$4,218 57	.....	Labor and inspection paid by New York, New Haven & Hartford Railroad.

Cost of Relocation of Main Pipe.

Street.	Location.	District.	Size. (Inch.)	Feet.	Cost of Depart- ment Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size. (Inch.)	Remarks.
Fifth street.	M street and N street.	South Boston.	8	190	\$328 09	\$198 35	\$13 34	\$539 78	6	Public, macadam.
Seventh street.	L street and O street.	South Boston.	8	1,740					6	
Monks street.	At Seventh street.	South Boston.	6	6	3,364 92	1,523 90	99 64	4,988 46	6	Public, macadam.
Peters street.	From Seventh street	South Boston.	6	6					6	
Broadway	K street and H street.	South Boston.	8	1,072	2,119 43	2,172 75	118 28	4,410 46	6	Public, granite block, gravel base.
Fourth street.	Over railroad bridge.	South Boston.	8	170	1,232 25	670 57	39 43	1,942 25	6	Public.
Fourth street.	Over railroad bridge	South Boston.	20	181					20	
Moreland street.	Brook avenue and Dennis street.	Roxbury.	8	26	233 56	41 60	39 00	314 16	6	Public, macadam.
Milton street.	Adams street and Paul road.	Dorchester.	8	53	96 48	33 00		129 48	8	Public, gravel.
Dent street.	Ivory street and Vale street.	West Roxbury.	8	437	685 63	514 38	33 24	1,233 25	6 & 8	Private, unconstructed rock.
Eastburn street.	From Washington street.	Brighton.	8	36	112 78	50 00		162 78	6	Public, macadam.
	Totals.		8	3,724	\$8,173 14	\$5,204 55	\$342 83	\$13,720 62	....
			6	12						
			20	181						

Cost of Relocation of Main Pipe.—*Concluded.*

Street.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size (Inch.)	Remarks.
Tremont street.....	Washington street and Newton line	Brighton.	10	1,830					6	
Tip Top street.....	From Tremont street.....	Brighton.	8	3	\$5,182 11	\$3,203 58	\$203 60	\$8,589 29	8	Public, macadam.
Tremont place.....	From Tremont street.....	Brighton.	6	54					6	
Cuffin street.....	From Tremont street.....	Brighton.	10	237					6	
	Totals.....		10	2,067	\$5,182 11	\$3,203 58	\$203 60	\$8,589 29		
			6	54						
			8	3						
Merchants row.....	At South Market street.....	City.	12	14	\$9,718	\$30 90		\$128 08	12	Public, granite block.
Second street.....	Granite and A streets.....	South Boston.	12	200	619 21	180 72	*	799 83		Public, granite block.
A street.....	Second and Fifth streets.....	South Boston.	12	974	2,766 63	*	*	2,766 63		Public, granite block.
Fisher avenue.....	At Hayden street.....	Roxbury.	6	6	580 72	438 85		1,019 57	6 1/2	Public, gravel.
			12	43					12	
Wick street.....	At Sacham street.....	Roxbury.	12	89						
			8	33	320 99	281 80	\$37 35	620 14	12	Public, macadam.
	At Wall street.....	Roxbury.	8	33					8	
	At Wall street.....	Roxbury.	12	43						
	Over Monument Bridge.....	Dorchester.	12	201	489 76	198 27	26 88	714 91	12	Public
	Over Monument Bridge.....	Dorchester.	12	24	63 44	8 63		71 07		Public.

Centre street.....	Washington and Centre streets.....	West Roxbury.....	12	1,250	2,587 65	3,860 69	425 90	6,904 24	12	Under construction.
Washington street.....	No. 8503.....	West Roxbury.....	12	8	44 52	15 25	.....	59 77	12	Granite block.
Cambridge street.....	At bridge.....	Charlottesville.....	12	332	125 38	104 13	.....	229 51	12	Public.
	Totals.....		12	3,178	\$7,694 48	\$5,129 24	\$490 13	\$13,313 85		
			6	6						
			8	33						
Atlantic avenue.....	No. 125.....	City.....	16	13	\$256 40	\$103 13	.....	\$359 53	16	Public, granite block, grouted joints.
Massachusetts avenue.....	Shirley and Clapp streets.....	Dorchester.....	16	112	287 84	82 63	.....	340 47	16	Public, granite block.
	Totals.....		16	125	\$514 24	\$185 76	.....	\$700 00		
Conder street.....	At Brooks street. In old Water Service yard.....	East Boston.....	20	60	\$337 18	\$75 25	.....	\$412 43	20	
Brookline avenue.....	Under Boston & Albany Railroad Bridge.....	Roxbury.....	40	56	1,552 63	23,101 39	\$702 72	25,356 74	28	
			42	207	.....	.....	.....	.....	40	
Commonwealth ave- nue.....	Beacon street and Charlesgate East.....	Roxbury.....	36	89	663 18	8,344 93	502 32	9,510 43	36	Public, tar.
			48	491	.....	.....	.....	.....	48	Macadam.
Charlesgate West.....	At Commonwealth avenue.....	Roxbury.....	12	17	.....	.....	.....	.....	12	Macadam.

* Paid by Boston Transit Commission.

WATERWORKS STATISTICS — CITY OF BOSTON.

FOR THE FISCAL YEAR ENDING JANUARY 31, 1919.

CONSUMPTION.

Estimated population supplied	790,330
Total consumption for year 1918	34,541,410,000 gallons
Passed through meters for year 1918	18,130,344,800 gallons
Percentage of consumption metered	52.49
Daily average consumption for the year 1918	94,634,000 gallons
Gallons per day to each consumer	120 gallons

DISTRIBUTION.

Kind of pipe: Cast iron, wrought iron.
 Sizes: 2-inch to 48-inch.
 Extended, miles: 2.58.
 Sizes, enlarged, miles: 4.91.
 Total miles now in use: 873.32.
 Public hydrants added: 50.
 Public hydrants now in use: 9,669.
 Stop gates added: 149.
 Stop gates now in use: 12,904.
 Stop gates smaller than 4-inch: 28.
 Number of blow-offs: 660.
 Range of pressure on mains: 30 to 90 pounds.

Table Showing Daily Consumption of Water in the City of Boston, Number of Services, Percentage of Services Metered, also Decrease in Daily per Capita Consumption Since the Meter Law of 1907 Went Into Effect.

YEAR.	Number of Services in Boston.	Number of Meters in Boston.	Percentage of Services Metered.	Estimated Population of Boston.	Daily Consumption in Boston. (Gallons).	Daily per Capita for Boston. (Gallons).	Population of Metropolitan District.	Daily Consumption in Metropolitan District. (Gallons.)	Metropolitan Daily per Capita.
1907.....	93,942	5,185	5.5	628,520	96,422,800	153	955,760	124,145,600	130
1908.....	94,960	5,380	5.7	643,810	98,379,300	153	973,320	125,441,000	129
1909.....	96,132	12,048	12.5	659,110	94,029,900	143	997,760	119,119,100	119
1910.....	93,780	18,467	19.7	674,400	87,346,700	130	1,022,230	112,092,100	110
1911.....	95,037	25,206	26.5	688,520	85,571,500	124	1,046,630	109,994,800	105
1912.....	* 99,700	† 34,565	34.8	718,900	90,037,500	125	1,086,690	116,230,700	107
1913.....	101,100	41,168	40.7	735,098	79,390,600	108	1,104,263	103,847,700	94
1914.....	102,449	48,091	46.9	747,830	81,877,800	109	1,134,180	107,036,100	94
1915.....	103,980	54,458	52.3	† 745,439	77,051,800	104	1,164,600	101,941,500	88
1916.....	105,386	60,129	57.5	762,700	80,358,800	105	1,190,220	106,337,800	89
1917.....	105,352	63,071	59.9	776,520	82,073,200	106	1,215,840	110,032,300	90
1918.....	105,458	63,187	59.9	790,330	94,634,000	120	1,241,460	129,764,000	105

* Includes 2,562 acquired by annexation of Hyde Park.

† Actual census, 1915.

† Includes 1,540 from Hyde Park.

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*Table Shou
age of
of 190'*

YEAR.
1907.....
1908.....
1909.....
1910.....
1911.....
1912.....
1913.....
1914.....
1915.....
1916.....
1917.....
1918.....

HIGH PRESSURE FIRE SERVICE.

The only work of importance done during the year was the laying of 5,036 linear feet of pipe in Commercial street, Hanover street, etc., upon which 18 hydrants were installed.

FINANCIAL STATEMENT FOR THE YEAR ENDING JANUARY 31, 1919.

Expended to January 31, 1918 \$721,952 39

Expenditures during the year 1918-19:

Salaries and wages:

Engineers and assist-

ants \$8,983 37

Inspectors 4,035 64

Mechanics 1,374 75

Clerks 1,366 03

Laborers 561 00

Foremen 552 56

Total pay rolls	\$16,873 35
Construction of distribution system,	66,984 50
Water pipes and castings	12,469 02
Professional services	506 00
Tools and repairs, hardware, etc. . .	457 12
Stationery	280 82
Repairs, paving, etc. . . .	235 60
Traveling expenses	169 62
Engineers' supplies	85 98
Telephones	63 59
Lumber	41 33
Oils	37 45
Towels, etc. . . .	26 05
Meals	26 00
Fuel	25 46
Automobile	21 33
Printing	15 01
Electric lighting	8 95
Cement and sand	5 94
Drain pipe	5 60

Carried forward \$98,347 37 \$721,952 39

<i>Brought forward</i>	\$98,347 37	\$721,952 39
Waterproof clothing	4 97	
Postage	2 68	
Advertising	1 00	

Total expenditures 1918-19	<u>98,347 37</u>
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Total expenditures to January 31, 1919	<u>\$820,299 76</u>
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Unexpended balance January 31, 1919	<u><u>\$179,700 24</u></u>
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Respectfully submitted,

F. A. McINNES,
Division Engineer.

APPENDIX F.

REPORT OF THE BOSTON AND CAMBRIDGE
BRIDGE COMMISSION.

BOSTON, February 1, 1919.

To the Honorable the Mayor:

SIR,— As commissioner for the City of Boston I respectfully submit herewith the annual report of the Boston and Cambridge Bridge Commission for the year ending January 31, 1919.

This commission is composed of two members, one appointed by the Mayor of the City of Boston, and the other by the Mayor of the city of Cambridge, under provisions of chapter 467, Acts of 1898.

The commission has charge of the maintenance of the following-named bridges connecting Boston and Cambridge: Anderson, Brookline Street, Cambridge, Harvard, Prison Point, River Street and Western Avenue to Cambridge.

As there is no separate appropriation made for the City of Boston's portion of the expenses of this commission, same is taken from the appropriation for the Bridge and Ferry Division, Bridge Service. The amount expended during the fiscal year ending January 31, 1919, was \$23,942.63.

BROOKLINE STREET BRIDGE.

The under planking on this bridge, over the tracks of the Boston & Albany Railroad, is getting in a bad condition and in the near future will have to be replaced. A large amount of patching has been done on this bridge during the past year.

CAMBRIDGE BRIDGE.

The lamp-posts on this bridge, which have been a constant source of trouble, were repaired during the past year.

HARVARD BRIDGE.

The roadway of Harvard Bridge, on account of the bad condition of the stringers and under planking, was in such condition that a contract for replanking and repaving the bridge was awarded by the commissioners to the Rowe Contracting Company on August 13, 1918. On account of the difficulty in obtaining materials the work could not be completed in 1918 but will be finished in the spring of 1919. Nearly all the stringers and deck planking have been found to be rotten and very little of this material can be used again. A new type of floor of beech and maple strips, nailed together in slabs, is being placed for the wearing surface with the expectation of adding to the strength of the floor, which is very light for the heavy motor traffic now using the bridge.

The floor of the draw span needs entire reconstruction and the sidewalks are in bad condition and should be rebuilt. The draw span is worn so that it is lower than the approach spans and should be raised to correspond to the grades of the approach spans.

PRISON POINT BRIDGE.

Iron railings have been substituted for the old rotten and unsightly wooden fences and a new steel stairway, in a more convenient location, was built to replace the old wooden one. This work was done under contract with the Boston Structural Steel Company for the sum of \$2,291 and was completed April 25, 1918. A new operating house was built in a more accessible location and electrical and mechanical appliances were overhauled and repaired.

This bridge was resheathed during the past year.

RIVER STREET BRIDGE AND WESTERN AVENUE BRIDGE.

These bridges were resheathed during the past year.

Respectfully submitted,

THOMAS F. SULLIVAN,
Commissioner for the City of Boston.

Expenditures for Year 1918-19.

(Being the Portion Paid by the City of Boston — Which is One Half — of the Total Expenditures.)

	Administration.	Anderson Bridge.	Cambridge Street-River Street Bridge.	Cambridge Bridge.	Essex Street-Brookline Street Bridge.	Harvard Bridge.	Prison Point Bridge.	Western Avenue Bridge to Cambridge.	Totals.
Salaries.....	\$250 00	.....	\$3,409 79	\$1,816 02	.....	\$3,511 81	\$3,517 50	.....	\$12,505 12
Inspection.....	.....	.....	94 00	.....	\$56 00	362 00	116 00	\$44 00	672 00
Repairs.....	.....	.....	431 58	370 51	318 30	1,968 94	2,062 90	352 44	5,494 67
Lumber.....	.....	.....	263 20	.....	140 85	865 42	542 63	195 55	2,007 65
Light.....	.....	\$298 88	25 58	1,325 20	181 10	743 11	17 64	25 64	2,617 15
Fuel.....	.....	.....	28 46	.....	.....	43 65	33 02	.....	105 13
Supplies.....	.....	8 36	61 34	12 03	12 15	99 24	31 34	9 65	234 11
Removing sweepings.....	.....	.....	.....	.....	.....	164 87	.....	.....	164 87
Printing and stationery.....	52 20	.....	.....	.....	.....	.....	.....	.....	52 20
Telephone and traveling expenses.....	66 38	.....	.....	.....	.....	.....	.....	.....	66 38
Advertising.....	23 35	.....	.....	.....	.....	.....	.....	.....	23 35
Totals.....	\$391 93	\$307 24	\$4,313 95	\$3,523 76	\$708 40	\$7,759 04	\$6,311 03	\$627 28	\$23,942 63

Monthly Summary of Draw Openings, Boston and Cambridge Bridges, February 1, 1918, to January 31, 1919.

	CAMBRIDGE STREET- RIVER STREET BRIDGE.			HARVARD BRIDGE.			PRISON POINT BRIDGE.			WESTERN AVENUE BRIDGE TO CAMBRIDGE.		
	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.
1918.												
February.....							21	3	12			
March.....				15	3	10	36	6	24			
April.....				43	10	27	34	7	22			
May.....				52	8	36	42	6	25			
June.....	28		6	36	6	23	21	4	12	28		6
July.....	3		2	44	7	28	43	7	25	3		2
August.....	4		2	70	13	42	33	5	12	4		2
September.....				41	8	24	40	8	24			
October.....				68	14	41	18	2	12			
November.....				61	10	38	6	1	4			
December.....				38	7	25	3	1	2			
1919.												
January.....				3		2	9	1	6			
Total.....	35		10	471	86	296	306	51	190	35		10

Annual Summary of Draw Openings, February 1, 1918, to January 31, 1919.

BARRIER.	TUGS.			BARROWS.			ALL OTHERS.			TOTAL VESSELS.			CARGOES.	OPENINGS.
	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.		
Cambridge Street-River street.....	292	292	584	178	178	356	35	35	70	35	35	70	86	10
Harvard.....	190	10	200	86	4	90	1	1	2	471	16	487	51	296
Prison Point.....							34	2	36	290	16	306	51	180
Western avenue to Cambridge.....							35	35	70	35	35	70	35	10
Totals.....	482	10	492	244	4	248	105	2	107	831	16	847	137	496

**DOCUMENT NUMBERS OF ANNUAL REPORTS OF THE
PUBLIC WORKS DEPARTMENT.**

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
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Annual report.....	1915	1916	26
Annual report.....	1916	1917	26
Annual report.....	1917	1918	26
Annual report.....	1918	1919	26





